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PATENT APPLICATION
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(Only for new nonprovisional applications under 37 C.F.R. § 1.53 (b))

Attorney Docket No.

LEX-0051-USA

First Inventor or Application
Identifier

Glenn Friedrich et al.

Title

Novel Mutated Mammalian Cells and Animals

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APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents

ADDRESS TO:

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Washington, DC 202311 ☐ *Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)5. ☐ Microfiche Computer Program (Appendix)2 ☒ Specification [Total 18]
Pages
(preferred arrangement set forth below)6 Nucleotide and/or Amino Acid Sequence Submission
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- Descriptive title of the Invention
- Cross References to Related Applications
- Statement Regarding Fed sponsored R & D
- Reference to Microfiche Appendix
- Background of the Invention
- Brief Summary of the Invention
- Brief Description of the drawings (if filed)
- Detailed Description
- Claim(s)
- Abstract of the disclosure

a ☐ Computer Readable Copyb. ☒ Paper Copy (identical to computer copy)c ☐ Statement verifying identity of above copies3 ☒ Drawing(s) (35 U.S.C. 113) [Total 15]
Sheets

4. Oath or Declaration [Total 1]

a ☒ Newly unexecuted (original or copy)b. ☐ Copy from a prior application (37 C.F.R. § 1.63(d))
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Signed statement attached deleting
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see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).**NOTE FOR ITEMS 1 & 13: IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY FEES, A
SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1.27), EXCEPT IF
ONE FILED IN A PRIOR APPLICATION IS RELED UPON (37 C.F.R. § 1.28).****ACCOMPANYING APPLICATION PARTS**7 ☐ Assignment Papers (cover sheet & document(s))8. ☐ 37 C.F.R. § 3.73(b) Statement (when there is an assignee) ☐ Power of Attorney9. ☐ English Translation Document (if applicable)10. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations11. ☐ Preliminary Amendment12 ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)13. ☐ *Small Entity Statement(s) ☐ Statement filed in prior application,
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Lance K. Ashimoto

Registration No.

41866

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NOVEL MUTATED MAMMALIAN CELLS AND ANIMALS

The present application claims the benefit of U.S.
5 Provisional Application Ser. No. 60/157,651, filed October 4,
1999, which is herein incorporated by reference in its entirety.
The present application also incorporates U.S. Patent No.
6,080,576 and U.S. Applications Ser. Nos. 08/726,867, 08/728,963,
08/907,598, 08/942,806, 60/109,302, and 09/276,533 and their
10 respective disclosures herein by reference in their entirety.

1.0. FIELD OF THE INVENTION

The present invention is in the field of molecular genetics.
The application discloses novel mutated cells that are generated
15 by process involving the insertion of at least a portion of a
genetically engineered viral vector into the chromosome. The
specifically disclosed recombinant vector allows for the rapid
identification of the gene that has been mutated by using
nucleotide or amino acid sequence information to identify the
20 gene that has been mutated by the vector. When mutated embryonic
stem cell clones are produced, such cells can be used to produce
mutant animals capable of germline transmission of the described
mutated genes.

25 2.0. BACKGROUND OF THE INVENTION

Most mammalian genes are divided into exons and introns.
Exons are the portions of the gene that are spliced into mRNA and
encode the protein product of a gene. In genomic DNA, these
coding exons are often divided by noncoding intron sequences.
30 Although RNA polymerase transcribes both intron and exon
sequences, the intron sequences must be removed from the
transcript so that the resulting mRNA can be translated into
protein. Accordingly, all mammalian, and most eukaryotic, cells
have the machinery to splice exons to produce mRNA. Gene trap
35 vectors have been designed to insert into the introns of genes in
a manner that allows the cellular splicing machinery to splice

vector encoded exons to cellular mRNAs. Commonly, gene trap
vectors contain selectable marker sequences that are preceded by
strong splice acceptor sequences and are not preceded by a
promoter. Thus, when such vectors integrate into a gene, the
5 cellular splicing machinery splices exons from the trapped gene
onto the 5' end of the selectable marker sequence. Typically,
such selectable marker genes can only be expressed if the vector
encoding the gene has integrated into an intron. The resulting
gene trap events are subsequently identified by selecting for
10 cells that can survive selective culture.

Gene trapping has generally proven to be an efficient method
of mutating large numbers of genes. The insertion of the gene
trap vector creates a mutation in the trapped gene, and also
provides a molecular tag for ease of identifying the gene that
15 has been trapped. When ROSA β geo was used to trap genes it was
demonstrated that at least 50% of the resulting mutations
resulted in a phenotype when examined in mice. This indicates
that the gene trap insertion vectors are useful mutagens.
Although a powerful tool for mutating genes, the potential of the
20 method has historically been limited by the difficulty in
identifying the trapped genes. Methods that have been used to
identify trap events rely on the fusion transcripts resulting
from the splicing of exon sequences from the trapped gene to
sequences encoded by the gene trap vector. Common gene
25 identification protocols used to obtain sequences from these
fusion transcripts include 5' RACE, cDNA cloning, and cloning of
genomic DNA surrounding the site of vector integration. However,
these methods have proven labor intensive, not readily amenable
to automation, and generally impractical for high-throughput.

30 More recently, vectors have been developed that rely on a
new strategy of gene trapping that uses a vector that contains a
selectable marker gene preceded by a promoter and followed by a
splice donor sequence instead of a polyadenylation sequence.
These vectors do not provide selection unless they integrate into

a gene and subsequently trap downstream exons which provide a polyadenylation sequence. Integration of such vectors into the chromosome results in the splicing of the selectable marker gene to 3' exons of the trapped gene. These vectors provide a number of advantages. They can be used to trap genes regardless of whether the genes are normally expressed in the cell type in which the vector has integrated. In addition, cells harboring such vectors can be screened using automated (e.g., 96-well plate format) gene identification assays such as 3' RACE (see generally, Frohman, 1994, PCR Methods and Applications, 4:S40-S58). Using these vectors it is possible to produce large numbers of mutations and rapidly identify the mutated, or trapped, gene by DNA sequence analysis.

3.0. SUMMARY OF THE INVENTION

The subject invention provides numerous isolated mammalian mutant cell clones that are each characterized by the insertion of a mutagenic genetically engineered polynucleotide sequence into a gene identifiable as corresponding to one or more of the OMNIBANK gene trapped sequences (GTSS) disclosed in Sequence Listing.

The subject invention further contemplates a mutated cell, and particularly a mutated ES cell, and the animals derived from such ES cell that stably maintain a genetically engineered mutation in a gene identifiable as corresponding to one of the disclosed GTSS.

4.0. DESCRIPTION OF THE SEQUENCE LISTING AND FIGURES

The Sequence Listing is a compilation of nucleotide sequences obtained by sequencing clonal lines of gene trapped murine ES cells.

Figures 1A-1C present a diagrammatic representation of representative gene trap vectors used to generate the described sequences.

Figure 2 provides an index to the Sequence Listing and the corresponding database accession numbers for the genes that have been mutated according to the present invention.

5 **5.0. DETAILED DESCRIPTION OF THE INVENTION**

 The current invention relates to novel mutated mammalian cells that are each characterized by the insertion of a recombinant (*i.e.*, genetically engineered) mutagenic polynucleotide sequence into a gene identifiable as corresponding
10 to one of the GTSS of SEQ ID NOS: 1-574.
For the purposes of the present invention, the term "identifiable" is to be construed as indicating that a mammalian cell, and preferably, a murine ES cell, has been mutated by the insertion of a polynucleotide sequence of recombinantly
15 manipulated origin at a genetic locus that normally comprises polynucleotide sequence, and/or post-spliced exonic sequence, that is at least partially described in one of the GTSS of Sequence Listing. One method of determining whether one of the described mutated mammalian cells has a mutation in a gene of
20 interest is by comparing the polynucleotide sequence (or a corresponding amino acid sequence) of the GTS identifying the mutated locus to the full length sequence of the gene.
Alternatively, such searches can be conducted by comparing the described GTS sequence to a well known database (such as, but not
25 limited to GENBANK) using established computer algorithms including, but not limited to, BLASTX, FASTA, BLASTN, BLASTP, TBLASTN, and TBLASTX using the default parameters used, for example, at the National Center for Biotechnology Information web site (www.ncbi.nlm.nih.gov). The GTSS reported in the Sequence
30 Listing have been compared to such a database (GENBANK), and the accession numbers of the genes that have been mutated are presented in Figure 2. Accordingly, an additional aspect of the subject invention includes mutated mammalian, preferably murine, cells, or isolated cell lines, that have at least one engineered

mutation in a gene identified by GENBANK or GENESEQ (for example) accession number in Figure 2.

As used herein, the terms "mutated" or "mutation" mean that the genetic locus has been altered by a process involving the integration or incorporation of a genetically engineered polynucleotide sequence into the genome of the cell with the result that the subsequent levels of activity of the product normally encoded by the locus is altered (*i.e.*, reduced, increased, or substantially ablated). In those instances where the mutation substantially completely disrupts the expression or activity of the product normally encoded by the locus (*i.e.*, a null mutation), a cell that is heterozygous for the mutated allele will typically produce about one half of the product of a nonmutated cell (via a gene dosage effect), and about twice the amount of product produced by a cell that is homozygous for the mutant allele.

The term "recombinantly manipulated" shall mean that such compositions comprising such molecules or polynucleotides have been genetically engineered using molecular biology methodologies *in vitro* or *ex vivo* (see generally, Sambrook *et al.*, 1989, Molecular Cloning, A Laboratory Manual, Cold Springs Harbor Press, N.Y.; and Ausubel *et al.*, 1989, Current Protocols in Molecular Biology, Green Publishing Associates and Wiley Interscience, N.Y.).

Where, the specifically exemplified mammalian cells, *i.e.*, embryonic stem cells (Lex-1 cells from murine strain A129), are mutated by a process involving the insertion of at least a portion of a genetically engineered vector sequence into the gene of interest, the mutated embryonic stem cells can be microinjected into blastocysts which are subsequently introduced into pseudopregnant female hosts and carried to term using established methods such as those described in, for example, "Mouse Mutagenesis", 1998, Zambrowicz *et al.*, eds., Lexicon Press, The Woodlands, TX, and periodic updates thereof, herein

incorporated by reference. The resulting chimeric animals are subsequently bred to produce offspring capable of germline transmission of an allele containing the engineered mutation in the gene of interest.

5 An alternative method of producing mutated cells and animals in the specifically exemplified genes involves the process of gene targeting by homologous recombination using methods such as those exemplified in U.S. Application Ser. No. 09/171,642, which is herein incorporated by reference in its entirety. Mutations
10 produced using such methods include, but are not limited to knockout mutations, "knockin" mutations (where a human gene, for example, is used to replace its murine orthologs), can be conditional, can include point mutations, and mutations that activate gene expression. Some of the mutations described above
15 (conditional mutations, point mutations, etc.) can be produced via processes that involve the substantial removal of vector encoded sequences (often recombines mediated) subsequent to the incorporation of the recombinantly manipulated sequences into the genome.

20 **5.1. MUTATED MAMMALIAN CELLS OF THE PRESENT INVENTION**

The presently described mutated cells have genetically engineered mutations in genes identifiable as corresponding to, or normally comprising, at least a portion of a sequence reported in the
25 Sequence Listing as SEQ ID NOS: 1-574. Additional embodiments of the present invention are cells comprising engineered mutations in homologs, paralogs, orthologs, etc., of the mutated genes disclosed in the Sequence Listing. Such homologs, paralogs, and orthologs include genes having sequences that hybridize to one or
30 more of the disclosed GTSS of SEQ ID NOS: 1-574 under stringent, or preferably highly stringent, conditions. Hybridization conditions also provide an alternative means of identifying the mutated genes corresponding to the GTSS reported in the sequence listing. Typically, such genes will be identifiable because a

disclosed GTS, or portion thereof, shall hybridize to the gene under stringent conditions.

By way of example and not limitation, high stringency hybridization conditions can be defined as follows:

- 5 Prehybridization of filters containing DNA to be screened is carried out for 8 h to overnight at 65°C in a buffer containing 6X SSC, 50mM Tris-HCl (pH 7.5), 1mM EDTA, 0.02% PVP, 0.02% Ficoll, 0.02% BSA, and 500 µg/ml denatured salmon sperm DNA. Filters are hybridized for 48 h at 65°C in prehybridization
- 10 mixture containing 100µg/ml denatured salmon sperm DNA and 5-20 x 10⁶ cpm of ³²P-labeled probe (alternatively, as in all hybridizations described herein, approximately 42, 44, 46, 48, 50, 52, 54, 56, 58, 62, 64, 66, 68, 70, or about 72 degrees or more can be used). The filters are then washed in approximately
- 15 1X wash mix (10X wash mix contains 3M NaCl, 0.6M Tris base, and 0.02M EDTA, alternatively, as with all washes described herein, 2X, 3X, 4X, 5X, 6X wash mix, or more, can be used) twice for 5 minutes each at room temperature, then in 1X wash mix containing 1% SDS at 60°C (alternatively, as in all washes described herein,
- 20 approximately 42, 44, 46, 48, 50, 52, 54, 56, 58, 62, 64, 66, 68, 70, or about 72 degrees or more can be used) for about 30 min, and finally in 0.3X wash mix (alternatively, as in all final washes described herein, approximately, 0.2X, 0.4X, 0.6X, 0.8X, 1X, or any concentration between about 2X and about 6X can be
- 25 used in conjunction with a suitable wash temperature) containing 0.1% SDS at 60°C (alternatively, approximately 42, 44, 46, 48, 50, 52, 54, 56, 58, 62, 64, 66, 68, 70, or about 72 degrees or more can be used) for about 30 min. The filters are then air dried and exposed to x-ray film for autoradiography. In an
- 30 alternative protocol, washing of filters is done for 37°C for 1 h in a solution containing 2X SSC, 0.01% PVP, 0.01% Ficoll, and 0.01% BSA. This is followed by a wash in 0.1X SSC at 50°C for 45 min before autoradiography. Another example of hybridization under highly stringent conditions is hybridization to filter-

bound DNA in 0.5 M NaHPO₄, 7% sodium dodecyl sulfate (SDS), 1 mM EDTA at 65°C, and washing in 0.1xSSC/0.1% SDS at 68°C (Ausubel F.M. et al., eds., 1989, Current Protocols in Molecular Biology, Vol. I, Green Publishing Associates, Inc., and John Wiley & sons, Inc., New York, at p. 2.10.3).

Alternatively, moderately stringent conditions can be used (e.g., washing in 0.2xSSC/0.1% SDS at 42° C (Ausubel et al., 1989, *supra*). Moderately stringent conditions can be additionally defined, for example, as follows: Filters containing DNA are pretreated for 6 h at 55°C in a solution containing 6X SSC, 5X Denhart's solution, 0.5% SDS and 100 µg/ml denatured salmon sperm DNA. Hybridizations are carried out in the same solution and 5-20 x 10⁶ cpm ³²P-labeled probe is used. Filters are incubated in hybridization mixture for 18-20 h at 55°C (alternatively, as in all hybridizations described herein, approximately 42, 44, 46, 48, 50, 52, 54, 56, 58, 62, 64, 66, 68, 70, or about 72 degrees or more can be used in combination with a suitable concentration of salt). The filters are then washed in approximately 1X wash mix (10X wash mix contains 3M NaCl, 0.6M Tris base, and 0.02M EDTA, alternatively, as with all washes described herein, 2X, 3X, 4X, 5X, 6X wash mix, or more, can be used) twice for 5 minutes each at room temperature, then in 1X wash mix containing 1% SDS at 60°C (alternatively, as in all washes described herein, approximately, 42, 44, 46, 48, 50, 52, 54, 56, 58, 62, 64, 66, 68, 70, or about 72 degrees or more can be used) for about 30 min, and finally in 0.3X wash mix (alternatively, as in all final washes described herein approximately 0.2X, 0.4X, 0.6X, 0.8X, 1X, or any concentration between about 2X and about 6X can be used in conjunction with a suitable wash temperature) containing 0.1% SDS at 60°C (alternatively, approximately 42, 44, 45, 48, 50, 52, 54, 56, 58, 62, 64, 66, 68, 70, or about 72 degrees or more can be used) for about 30 min. The filters are then air dried and exposed to x-ray film for autoradiography.

In an alternative protocol, washing of filters is done twice for 30 minutes at 60°C in a solution containing 1X SSC and 0.1% SDS. Filters are blotted dry and exposed for autoradiography.

Other conditions of moderate stringency which may be used are well-known in the art. For example, washing of filters can be done at 37°C for 1 h in a solution containing 2X SSC, 0.1% SDS. Another example of hybridization under moderately stringent conditions is washing in 0.2xSSC/0.1% SDS at 42°C (Ausubel et al., 1989, *supra*). Such less stringent conditions may also be, for example, low stringency hybridization conditions. By way of example and not limitation, procedures using such conditions of low stringency are as follows (see also Shilo and Weinberg, 1981, Proc. Natl. Acad. Sci. USA 78:6789-6792): Filters containing DNA are pretreated for 6 h at 40°C in a solution containing 35% formamide, 5X SSC, 50mM Tris-HCl (pH 7.5), 5mM EDTA, 0.1% PVP, 0.1% Ficoll, 1% BSA, and 500 µg/ml denatured salmon sperm DNA. Hybridizations are carried out in the same solution with the following modifications: 0.02% PVP, 0.02% Ficoll, 0.2% BSA, 100µg/ml salmon sperm DNA, 10% (wt/vol) dextran sulfate, and 5-20 X 10⁶ cpm ³²P-labeled probe is used. Filters are incubated in hybridization mixture for 18-20 h at 40°C (alternatively, as in all hybridizations described herein, approximately 42, 44, 46, 48, 50, 52, 54, 56, 58, 62, 64, 66, 68, 70, or about 72 degrees or more can be used). The filters are then washed in approximately 1X wash mix (10x wash mix contains 3M NaCl, 0.6M Tris base, and 0.02M EDTA, alternatively, as with all washes described herein, 2X, 3X, 4X, 5X, 6X wash mix, or more, can be used) twice for five minutes each at room temperature, then in 1X wash mix containing 1% SDS at 60°C (alternatively, as in all washes described herein, approximately 42, 44, 46, 48, 50, 52, 54, 56, 58, 62, 64, 66, 68, 70, or about 72 degrees or more can be used) for about 30 min, and finally in 0.3X wash mix (alternatively, as in all final washes described herein, approximately, 0.2X, 0.4X, 0.6X, 0.8X, 1X, or any concentration

between about 2X and about 6X can be used in conjunction with a suitable wash temperature) containing 0.1% SDS at 60°C (alternatively, approximately 42, 44, 46, 48, 50, 52, 54, 56, 58, 62, 64, 66, 68, 70, or about 72 degrees or more can be used) for about 30 min. The filters are then air dried and exposed to x-ray film for autoradiography. In yet another alternative protocol, washing of filters is done for 1.5 h at 55°C in a solution containing 2X SSC, 25mM Tris-HCl (pH 7.4), 5mM EDTA, and 0.1% SDS. The wash solution is replaced with fresh solution and incubated an additional 1.5 h at 60°C. Filters are then blotted dry and exposed for autoradiography. If necessary, filters are washed for a third time at 65-68°C and reexposed to film. Other conditions of low stringency which may be used are well known in the art (e.g., as employed for cross-species hybridizations). Preferably, GTS variants identified or isolated using the above methods will also encode a functionally equivalent gene product (i.e., protein, polypeptide, or domain thereof, encoding or otherwise associated with a function or structure at least partially encoded by the complementary GTS).

Low stringency conditions are well known to those of skill in the art, and will vary predictably depending on the specific organisms from which the library and the labeled sequences are derived. For guidance regarding such conditions see, for example, Sambrook et al., 1989, Molecular Cloning, A Laboratory Manual, Cold Springs Harbor Press, N.Y.; and Ausubel et al., 1989, Current Protocols in Molecular Biology, Green Publishing Associates and Wiley Interscience, N.Y.

The identification of homologs, heterologs, or paralogs of SEQ ID NOS: 1-574 in other, preferably related, species can be useful for developing additional animal model systems that are closely related to humans for purposes of drug discovery. Genes at other genetic loci within the genome that encode proteins which have extensive homology to one or more domains of the gene products encoded by SEQ ID NOS: 1-574 can also be identified via

similar techniques. In the case of cDNA libraries, such screening techniques can identify clones derived from alternatively spliced transcripts in the same or different species.

5 Techniques useful to disrupt a gene in a cell and especially an ES cell that may already have a disrupted gene are disclosed in copending US patent applications Nos. 08/726,867; 08/728,963; 08/907,598; and 08/942,806, all of which are hereby incorporated herein by reference in their entirety, are within the scope of
10 the current invention to disrupt a gene that encodes a polynucleotide of the current invention.

5.2. USES OF THE DESCRIBED MUTATED GENES AND ANIMALS

15 The described mutated cells and animals are used to investigate and define the cellular and biological functions of the mutated genes. Producing a scientific model that accurately accounts for the large number of genes, proteins, and macromolecules within a single cell has thus far proved beyond the capabilities of existing computer technology. It should thus
20 not be surprising that the far more complex task of modeling the various intricacies, cross and direct redundancies, and interrelated functions of the various metabolic and catabolic processes that occur within a single cell has also proven largely intractable to algorithmic methods of modeling and prediction.
25 Even if one assumes that computer modeling of inherently chaotic/heuristic processes will rapidly mature in the near future, such methods, at best, can only provide predictions that subsequently require practical validation. Several decades of empirical data have proven that mutant phenotypes provide a
30 valuable source of such validation.

 The mutated diploid mammalian cells of the present invention will initially exist as mutated diploid cells that are heterozygous (except where genes on the X or Y chromosomes are mutated) for the mutations identified in the sequence listing.

As such, via a "gene dosage" effect, the mutated cells can typically be characterized by the fact that they produce about one half of the mutated transcript/activity relative to cells having two nonmutated or wild type copies of the corresponding gene.

When mutant animals are produced from the mutated cells, heterozygous animals capable of germline transmission of the mutated allele can be bred to produce embryos or offspring that are homozygous for the mutant allele. Such animals or embryos are a rich source of tissues and cells that do not express physiologically relevant amounts of the mutated genes or activities encoded thereby. Accordingly, an additional embodiment of the present invention are mutant cells and animals that have homozygous mutations in genes identifiable as corresponding to the GENBANK, or other database accession, numbers provided in Figure 2, or are identifiable as a homologs, paralog, or orthologs of a sequence provided in the Sequence Listing.

In addition to providing important information regarding the functional role of a given gene in its nonmutated state (*i.e.*, you learn about the function of the gene by discerning the effects of reducing or ablating the activity normally encoded by the gene), the described mutated cells and animals can be used as disease models, or in assays for compounds or genes (via gene delivery or transgenic methods) that compensate for the mutant phenotype and that can be used to treat diseases and disorders related to the observed phenotype. Alternatively, such products and genes can also be used to enhance desirable, if not normal, symptoms related to the observed phenotypes.

The gene replacement/delivery therapies described above should be capable of delivering gene sequences to the cell types within patients which express the peptide or protein having the desired activity.

The examples below are provided to illustrate the subject invention. These examples are provided by way of illustration and are not included for the purpose of limiting the invention in any way whatsoever.

5

6.0. EXAMPLES

6.1. GENERATION OF A LIBRARY OF MUTATED MOUSE ES CELLS DEFINED BY GTS SEQUENCES

10 The retroviral vector VICTR 3, described in detail in U.S. application Ser. No. 08/728,963, filed October 11, 1996, was used to generate a library of gene trapped ES cell clones that represent a portion of the described GTSs. A plasmid containing the VICTR 3 cassette was constructed by conventional cloning
15 techniques and designed to employ the features described above. Namely, the cassette contained a *PGK* promoter directing transcription of an exon that encodes the *puro* marker and ends in a canonical splice donor sequence. At the end of the puromycin exon, sequences were added as described that allow for the
20 annealing of two nested PCR and sequencing primers. The vector backbone was based on pBluescript KS+ from Stratagene Corporation.

The plasmid construct was linearized by digestion with *Sca* I which cuts at a unique site in the plasmid backbone. The plasmid
25 was then transfected into the mouse ES cell line AB2.2 by electroporation using a BioRad Genepulser apparatus. After the cells were allowed to recover, gene trap clones were selected by adding puromycin to the medium at a final concentration of 3 μ g/ml. Positive clones were allowed to grow under selection for
30 approximately 10 days before being removed and cultured separately for storage and to determine the sequence of the disrupted gene.

Total RNA was isolated from an aliquot of cells from each of 18 gene trap clones chosen for study. Five micrograms of this
35 RNA was used in a first strand cDNA synthesis reaction using the

"RS" primer. This primer has unique sequences (for subsequent PCR) on its 5' end and nine random nucleotides or nine T (thymidine) residues on its 3' end. Reaction products from the first strand synthesis were added directly to a PCR with outer primers specific for the engineered sequences of puromycin and the "RS" primer. After amplification, an aliquot of reaction products were subject to a second round of amplification using primers internal, or nested, relative to the first set of PCR primers. This second amplification provided more reaction product for sequencing and also provided increased specificity for the specifically gene trapped DNA.

The products of the nested PCR were visualized by agarose gel electrophoresis, and seventeen of the eighteen clones provided at least one band that was visible on the gel with ethidium bromide staining. Most gave only a single band which is an advantage in that a single band is generally easier to sequence. The PCR products were sequenced directly after excess PCR primers and nucleotides were removed by filtration in a spin column (Centricon-100, Amicon). DNA was added directly to dye terminator sequencing reactions (purchased from ABI) using the standard M13 forward primer a region for which was built into the end of the *puro* exon in all of the PCR fragments.

Subsequent studies have used both VICTR 3 and VICTR 20. Like VICTR 3, VICTR 20 is exemplary of a family of vectors that incorporate two main functional units: a sequence acquisition component having a strong promoter element (phosphoglycerate kinase 1) active in ES cells that is fused to the puromycin resistance gene (or other exon sequence) that is followed by a synthetic consensus splice donor (SD) sequence and lacks an operatively positioned polyadenylation sequence downstream from the SD sequence (PGKpuroSD); and 2) a mutagenic component that incorporates a splice acceptor sequence fused to a selectable and/or colorimetric marker gene and followed by a polyadenylation

sequence (for example, SA β geopA, SaneopA, SAIRESneopA, or SAIRES β geopA).

Also like VICTR 3, stop codons have been engineered into all three reading frames in the region between the 3' end of the selectable marker and the splice donor site. A diagrammatic description of structure and functions of VICTRs 3 and 20 is provided in Figure 1.

When VICTRs 3, 20, and various variations thereof such as the vectors and methods described in U.S. Applications Ser. Nos. 09/276,533, and 60/095,989 (the disclosures of which are herein incorporated by reference), were used in the commercial scale application of the presently disclosed invention, many mutagenized ES cell clones were rapidly engineered and obtained. Sequence analysis obtained from these clones has identified a wide variety of sequences. Each of the sequences presented in SEQ ID NOS: 1-574 identify novel mutations in the coding regions of mammalian genes that identifiable as corresponding to the sequences presented in the Sequence Listing. Alternatively, the described mutated cells are described by the database (GENBANK, GENSEQ, etc.) accession numbers for the corresponding genes that have been mutated (see Figure 2). The described mutated cells, and preferably ES cells, provide a valuable resource for defining, evaluating, or validating the biological function or disease/pharmaceutical relevance of each of these genes.

The cloned 3' RACE products resulting after the target ES cells were infected with one of the described gene trap vectors were purified using conventional column chromatography, (e.g., S300 and G-50 columns), and the products were recovered by centrifugation. Purified PCR products were quantified by fluorescence using PicoGreen (Molecular Probes, Inc., Eugene Oregon) as per the manufacturer's instructions.

Dye terminator cycle sequencing reactions with AmpliTaq® FS DNA polymerase (Perkin Elmer Applied Biosystems, Foster City, CA) were carried out using approximately 7 pmoles of sequencing

primer, and approximately 30-120 ng of 3' template.

Unincorporated dye terminators were removed from the completed sequencing reactions using G-50 columns as described above. The reactions were dried under vacuum, resuspended in loading buffer, and electrophoresed through a 6% Long Ranger acrylamide gel (FMC BioProducts, Rockland, ME) on an ABI Prism® 377 with XL upgrade as per the manufacturer's instructions. The sequences of the resulting amplicons, or GTSSs, are described in SEQ ID NOS: 1-574.

All publications and patents mentioned in the above specification are herein incorporated by reference. Various modifications and variations of the described method and system of the invention will be apparent to those skilled in the art without departing from the scope and spirit of the invention. Although the invention has been described in connection with specific preferred embodiments, it should be understood that the invention as claimed should not be unduly limited to such specific embodiments. Indeed, various modifications of the above-described modes for carrying out the invention which are obvious to those skilled in the field of molecular biology or related fields are intended to be within the scope of the following claims.

CLAIMS

WHAT IS CLAIMED IS:

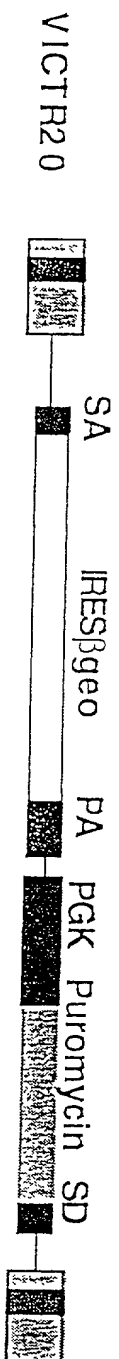
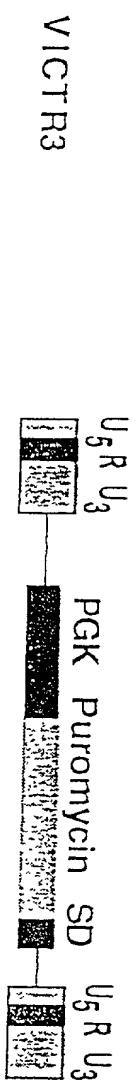
1. A genetically engineered mammalian cell that has been
5 mutated by a process comprising the insertion of a recombinantly
manipulated polynucleotide sequence into a gene in said
genetically engineered mammalian cell wherein said gene is
identifiable as corresponding to at least one of SEQ ID NOS: 1-
574.
- 10
2. The genetically engineered mammalian cell of Claim 1,
wherein said cell is murine.
3. A cell according to Claim 2, wherein said cell is an
15 embryonic stem cell.
4. The genetically engineered mammalian cell of Claim 1,
wherein said polynucleotide sequence is present on a viral
vector.
- 20
5. A cell according to Claim 4, wherein said viral vector
is a retroviral vector.
6. A cell according to Claim 4, wherein said viral vector
25 additionally comprises regions of targeting DNA that facilitate
gene targeting by homologous recombination.
7. An isolated murine embryonic stem cell line comprising
an engineered retroviral gene trap vector in at least one gene
30 comprising a polynucleotide sequence first disclosed in one of
SEQ ID NOS: 1-574.

ABSTRACT

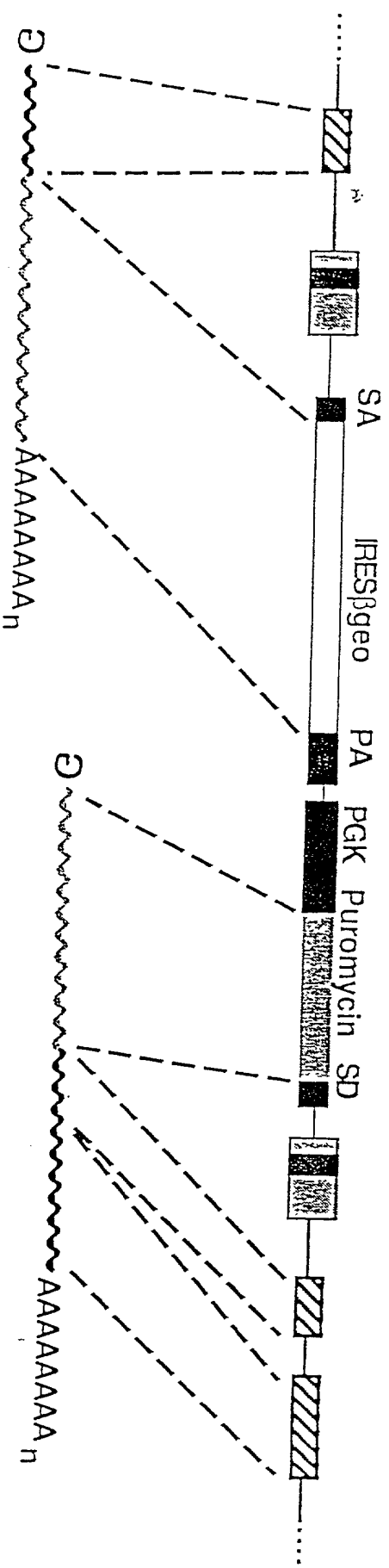
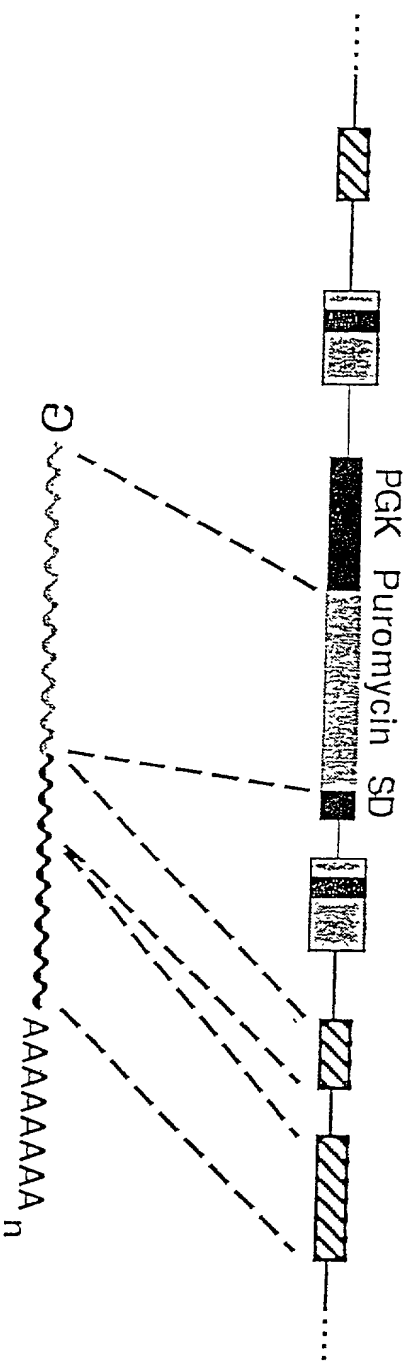
Novel mutated mammalian cells are provided that have been characterized by identifying the sequence of the genes that have been mutated. Preferably, novel mutated cells are murine ES cells that stably incorporate retroviral gene trap constructs in the specifically identified genes. The novel mutated cells and animals are useful in functional genomic analysis, and in the discovery and development of new therapeutic and diagnostics agents and methods.

10

A



Wildtype Locus 



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FIGURE 2

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FIGURE 2

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FIGURE 2

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FIGURE 2
 5 of 14

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FIGURE 2

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 OST100336 OC18185 (Similar To: U29500) Thu Sep 30 14:38:14 1999
 OST102200 OC18186 (Similar To: AA555888) Thu Sep 30 14:38:14 1999
 OST100365 OC18191 (Similar To: M97812) Thu Sep 30 14:38:14 1999
 OST100436 OC18200 (Similar To: AF090326) Thu Sep 30 14:38:14 1999
 OST100437 OC18201 (Similar To: J02756) Thu Sep 30 14:38:14 1999
 OST100497 OC18209 (Similar To: AA122589) Thu Sep 30 14:38:14 1999
 OST100501 OC18210 (Similar To: Y00848) Thu Sep 30 14:38:14 1999
 OST100503 OC18211 (Similar To: W53543) Thu Sep 30 14:38:14 1999
 OST92874 OC17497 (Similar To: AI182419) Thu Sep 30 14:38:14 1999
 OST100628 OC18227 (Similar To: AI173791) Thu Sep 30 14:38:14 1999
 OST100637 OC8661 (Similar To: AB003113) Thu Sep 30 14:38:14 1999
 OST100659 OC18234 (Similar To: AJ007909) Thu Sep 30 14:38:14 1999
 OST78213 OC915 (Similar To: AI448395) Thu Sep 30 14:38:14 1999
 OST100736 OC18248 (Similar To: AI315939) Thu Sep 30 14:38:14 1999
 OST100738 OC18249 (Similar To: AI410900) Thu Sep 30 14:38:14 1999
 OST100757 OC18252 (Similar To: U35323) Thu Sep 30 14:38:14 1999
 OST100774 OC18254 (Similar To: AC005742) Thu Sep 30 14:38:14 1999
 OST100797 OC18258 (Similar To: X68647) Thu Sep 30 14:38:14 1999
 OST100802 OC18260 (Similar To: U37353) Thu Sep 30 14:38:14 1999
 OST100894 OC18273 (Similar To: AF073297) Thu Sep 30 14:38:14 1999
 OST98358 OC17909 (Similar To: AA964365) Thu Sep 30 14:38:14 1999

FIGURE 2

OST100937 OC18278 (Similar To: C89519) Thu Sep 30 14:38:14 1999
 OST100992 OC18283 (Similar To: AV042016) Thu Sep 30 14:38:14 1999
 OST101094 OC18296 (Similar To: U76759) Thu Sep 30 14:38:14 1999
 OST101305 OC18317 (Similar To: X70472) Thu Sep 30 14:38:14 1999
 OST101319 OC18318 (Similar To: AJ002636) Thu Sep 30 14:38:14 1999
 OST101338 OC18320 (Similar To: AI466791) Thu Sep 30 14:38:14 1999
 OST101346 OC18322 (Similar To: Z50192) Thu Sep 30 14:38:14 1999
 OST101368 OC18325 (Similar To: AI481250) Thu Sep 30 14:38:14 1999
 OST101376 OC18327 (Similar To: AC004407) Thu Sep 30 14:38:14 1999
 OST101386 OC18330 (Similar To: AV036188) Thu Sep 30 14:38:14 1999
 OST101510 OC18345 (Similar To: U42624) Thu Sep 30 14:38:14 1999
 OST101512 OC18346 (Similar To: AF051726) Thu Sep 30 14:38:14 1999
 OST101516 OC18347 (Similar To: AI662973) Thu Sep 30 14:38:14 1999
 OST101560 OC18357 (Similar To: X99641) Thu Sep 30 14:38:14 1999
 OST101625 OC18363 (Similar To: X99946) Thu Sep 30 14:38:14 1999
 OST101636 OC18365 (Similar To: AI643662) Thu Sep 30 14:38:14 1999
 OST101647 OC18367 (Similar To: U83176) Thu Sep 30 14:38:14 1999
 OST101734 OC18371 (Similar To: U61111) Thu Sep 30 14:38:14 1999
 OST101772 OC18374 (Similar To: AF044174) Thu Sep 30 14:38:14 1999
 OST101848 OC18379 (Similar To: AA615946) Thu Sep 30 14:38:14 1999
 OST101861 OC18380 (Similar To: AA718203) Thu Sep 30 14:38:14 1999
 OST101943 OC18385 (Similar To: AI324125) Thu Sep 30 14:38:14 1999
 OST101969 OC18386 (Similar To: AI482242) Thu Sep 30 14:38:14 1999
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 OST102014 OC18389 (Similar To: AI606807) Thu Sep 30 14:38:14 1999
 OST102116 OC18402 (Similar To: M17243) Thu Sep 30 14:38:14 1999
 OST102190 OC18410 (Similar To: AI122275) Thu Sep 30 14:38:14 1999
 OST102365 OC18428 (Similar To: U13878) Thu Sep 30 14:38:14 1999
 OST102384 OC18431 (Similar To: AA106674) Thu Sep 30 14:38:14 1999
 OST102404 OC18435 (Similar To: AB020886) Thu Sep 30 14:38:14 1999
 OST102446 OC18439 (Similar To: AF051348) Thu Sep 30 14:38:14 1999
 OST102476 OC18444 (Similar To: AI448362) Thu Sep 30 14:38:14 1999
 OST102512 OC18451 (Similar To: AC002406) Thu Sep 30 14:38:14 1999
 OST102569 OC18458 (Similar To: AA655467) Thu Sep 30 14:38:14 1999
 OST102740 OC18498 (Similar To: AA624788) Thu Sep 30 14:38:14 1999
 OST102797 OC18507 (Similar To: X53081) Thu Sep 30 14:38:14 1999
 OST102833 OC18512 (Similar To: AI552379) Thu Sep 30 14:38:14 1999
 OST102891 OC18526 (Similar To: AC005742) Thu Sep 30 14:38:14 1999
 OST102911 OC18531 (Similar To: AI451777) Thu Sep 30 14:38:14 1999
 OST80033 OC7809 (Similar To: AA208937) Thu Sep 30 14:38:14 1999
 OST102954 OC18541 (Similar To: L31840) Thu Sep 30 14:38:14 1999
 OST103043 OC18553 (Similar To: M33385) Thu Sep 30 14:38:14 1999

FIGURE 2
8 of 14

OST37918 OC8835 (Similar To: U68182) Thu Sep 30 14:38:14 1999
OST103062 OC18557 (Similar To: AA544462) Thu Sep 30 14:38:14 1999
OST91628 OC17352 (Similar To: AI406661) Thu Sep 30 14:38:14 1999
OST103176 OC18578 (Similar To: AA498813) Thu Sep 30 14:38:14 1999
OST103191 OC18583 (Similar To: AB016963) Thu Sep 30 14:38:14 1999
OST103269 OC18595 (Similar To: M32071) Thu Sep 30 14:38:14 1999
OST103282 OC18598 (Similar To: AI551580) Thu Sep 30 14:38:14 1999
OST103306 OC18601 (Similar To: AI117475) Thu Sep 30 14:38:14 1999
OST103313 OC18604 (Similar To: AC005960) Thu Sep 30 14:38:14 1999
OST103365 OC18611 (Similar To: AA027717) Thu Sep 30 14:38:14 1999
OST77866 OC10636 (Similar To: M93264) Thu Sep 30 14:38:14 1999
OST32175 OC6994 (Similar To: AI045566) Thu Sep 30 14:38:14 1999
OST103500 OC18627 (Similar To: AI158711) Thu Sep 30 14:38:14 1999
OST90697 OC17258 (Similar To: AA109830) Thu Sep 30 14:38:14 1999
OST103585 OC18642 (Similar To: AA645000) Thu Sep 30 14:38:14 1999
OST103612 OC18653 (Similar To: AI226654) Thu Sep 30 14:38:14 1999
OST103632 OC18656 (Similar To: AA791497) Thu Sep 30 14:38:14 1999
OST103675 OC18664 (Similar To: AJ222968) Thu Sep 30 14:38:14 1999
OST103784 OC18671 (Similar To: AV043672) Thu Sep 30 14:38:14 1999
OST103935 OC18685 (Similar To: AA107240) Thu Sep 30 14:38:14 1999
OST103941 OC18687 (Similar To: U58337) Thu Sep 30 14:38:14 1999
OST104056 OC18693 (Similar To: AI172058) Thu Sep 30 14:38:14 1999
OST104114 OC18696 (Similar To: AA185951) Thu Sep 30 14:38:14 1999
OST104179 OC18703 (Similar To: AB009371) Thu Sep 30 14:38:14 1999
OST104217 OC18704 (Similar To: AC003063) Thu Sep 30 14:38:14 1999
OST104220 OC18705 (Similar To: AA060976) Thu Sep 30 14:38:14 1999
OST104322 OC18717 (Similar To: AU041129) Thu Sep 30 14:38:14 1999
OST104386 OC18727 (Similar To: U63386) Thu Sep 30 14:38:14 1999
OST104435 OC18735 (Similar To: AA955274) Thu Sep 30 14:38:14 1999
OST104461 OC18737 (Similar To: AF046060) Thu Sep 30 14:38:14 1999
OST104538 OC18746 (Similar To: AA644811) Thu Sep 30 14:38:14 1999
OST104551 OC18750 (Similar To: AA199100) Thu Sep 30 14:38:14 1999
OST104599 OC18755 (Similar To: AI195350) Thu Sep 30 14:38:14 1999
OST104610 OC18760 (Similar To: U27268) Thu Sep 30 14:38:14 1999
OST104675 OC18772 (Similar To: U84725) Thu Sep 30 14:38:14 1999
OST104677 OC18774 (Similar To: U76373) Thu Sep 30 14:38:14 1999
OST59488 OC12491 (Similar To: W96857) Thu Sep 30 14:38:14 1999
OST105532 OC18782 (Similar To: AA939372) Thu Sep 30 14:38:14 1999
OST104750 OC18783 (Similar To: E00593) Thu Sep 30 14:38:14 1999
OST104761 OC18785 (Similar To: AA220132) Thu Sep 30 14:38:14 1999
OST104778 OC18788 (Similar To: AI427509) Thu Sep 30 14:38:14 1999
OST104862 OC18798 (Similar To: Y15465) Thu Sep 30 14:38:14 1999

FIGURE 2

OST104931 OC18809 (Similar To: AI098029) Thu Sep 30 14:38:14 1999
 OST105045 OC18825 (Similar To: AI021488) Thu Sep 30 14:38:14 1999
 OST105067 OC18829 (Similar To: AV004732) Thu Sep 30 14:38:14 1999
 OST105091 OC18833 (Similar To: AA940318) Thu Sep 30 14:38:14 1999
 OST105173 OC18846 (Similar To: AA511161) Thu Sep 30 14:38:14 1999
 OST105181 OC18849 (Similar To: L12458) Thu Sep 30 14:38:14 1999
 OST105203 OC18850 (Similar To: AA497854) Thu Sep 30 14:38:14 1999
 OST105205 OC18851 (Similar To: U21050) Thu Sep 30 14:38:14 1999
 OST105439 OC18870 (Similar To: X52191) Thu Sep 30 14:38:14 1999
 OST9307 OC1889 (Similar To: AI592419) Thu Sep 30 14:38:14 1999
 OST105453 OC18872 (Similar To: C79730) Thu Sep 30 14:38:14 1999
 OST47120 OC10746 (Similar To: AA387535) Thu Sep 30 14:38:14 1999
 OST105476 OC18874 (Similar To: AA000443) Thu Sep 30 14:38:14 1999
 OST105533 OC18879 (Similar To: AC005938) Thu Sep 30 14:38:14 1999
 OST105556 OC4065 (Similar To: AA277365) Thu Sep 30 14:38:14 1999
 OST105566 OC18882 (Similar To: AA197595) Thu Sep 30 14:38:14 1999
 OST105584 OC18883 (Similar To: AI604572) Thu Sep 30 14:38:14 1999
 OST105597 OC18885 (Similar To: AI233254) Thu Sep 30 14:38:14 1999
 OST54916 OC6460 (Similar To: Y07783) Thu Sep 30 14:38:14 1999
 OST105640 OC18894 (Similar To: AI323941) Thu Sep 30 14:38:14 1999
 OST105765 OC18906 (Similar To: AA959545) Thu Sep 30 14:38:14 1999
 OST105829 OC5715 (Similar To: AA673279) Thu Sep 30 14:38:14 1999
 OST105996 OC18920 (Similar To: W83911) Thu Sep 30 14:38:14 1999
 OST106041 OC18922 (Similar To: AA036594) Thu Sep 30 14:38:14 1999
 OST106073 OC18925 (Similar To: AA035834) Thu Sep 30 14:38:14 1999
 OST106098 OC18932 (Similar To: AI020321) Thu Sep 30 14:38:14 1999
 OST106313 OC18958 (Similar To: AA189644) Thu Sep 30 14:38:14 1999
 OST106315 OC18959 (Similar To: AC005403) Thu Sep 30 14:38:14 1999
 OST106332 OC18962 (Similar To: AA444862) Thu Sep 30 14:38:14 1999
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 OST106357 OC18966 (Similar To: AA189644) Thu Sep 30 14:38:14 1999
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 OST106581 OC18986 (Similar To: D14570) Thu Sep 30 14:38:14 1999
 OST106594 OC18987 (Similar To: AA124650) Thu Sep 30 14:38:14 1999
 OST106602 OC18988 (Similar To: X68283) Thu Sep 30 14:38:14 1999
 OST106688 OC18996 (Similar To: U88328) Thu Sep 30 14:38:14 1999
 OST106722 OC19004 (Similar To: AV000089) Thu Sep 30 14:38:14 1999
 OST106728 OC19007 (Similar To: AU067280) Thu Sep 30 14:38:14 1999
 OST106731 OC19008 (Similar To: U34932) Thu Sep 30 14:38:14 1999
 OST106749 OC19013 (Similar To: AI595006) Thu Sep 30 14:38:14 1999
 OST106770 OC19019 (Similar To: AA959452) Thu Sep 30 14:38:14 1999
 OST106811 OC19028 (Similar To: AI643337) Thu Sep 30 14:38:14 1999

OST106856 OC19033 (Similar To: AU067347) Thu Sep 30 14:38:14 1999
OST106869 OC19037 (Similar To: AC005818) Thu Sep 30 14:38:14 1999
OST106881 OC19041 (Similar To: AA041850) Thu Sep 30 14:38:14 1999
OST106890 OC19045 (Similar To: AA832824) Thu Sep 30 14:38:14 1999
OST106939 OC19051 (Similar To: X98038) Thu Sep 30 14:38:14 1999
OST107012 OC19060 (Similar To: AB014471) Thu Sep 30 14:38:14 1999
OST107051 OC19067 (Similar To: L00014) Thu Sep 30 14:38:14 1999
OST107151 OC17614 (Similar To: D13121) Thu Sep 30 14:38:14 1999
OST107244 OC19086 (Similar To: AI153399) Thu Sep 30 14:38:14 1999
OST107292 OC19094 (Similar To: AA471918) Thu Sep 30 14:38:14 1999
OST107332 OC19096 (Similar To: AA855257) Thu Sep 30 14:38:14 1999
OST107356 OC19100 (Similar To: AA161864) Thu Sep 30 14:38:14 1999
OST107362 OC19102 (Similar To: L00686) Thu Sep 30 14:38:14 1999
OST90765 OC17264 (Similar To: AI181055) Thu Sep 30 14:38:14 1999
OST107568 OC19134 (Similar To: AA086739) Thu Sep 30 14:38:14 1999
OST107585 OC19138 (Similar To: AI112066) Thu Sep 30 14:38:14 1999
OST107600 OC19141 (Similar To: AI429194) Thu Sep 30 14:38:14 1999
OST112455 OC19166 (Similar To: AF003867) Thu Sep 30 14:38:14 1999
OST107787 OC19171 (Similar To: D17569) Thu Sep 30 14:38:14 1999
OST107800 OC19174 (Similar To: AA415893) Thu Sep 30 14:38:14 1999
OST107858 OC19184 (Similar To: U15654) Thu Sep 30 14:38:14 1999
OST107880 OC19187 (Similar To: AF109719) Thu Sep 30 14:38:14 1999
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OST107941 OC19196 (Similar To: AJ007909) Thu Sep 30 14:38:14 1999
OST108051 OC19209 (Similar To: AF013253) Thu Sep 30 14:38:14 1999
OST108104 OC17051 (Similar To: U34281) Thu Sep 30 14:38:14 1999
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OST108127 OC19220 (Similar To: AI450342) Thu Sep 30 14:38:14 1999
OST108173 OC19227 (Similar To: AI105407) Thu Sep 30 14:38:14 1999
OST108242 OC19233 (Similar To: X96548) Thu Sep 30 14:38:14 1999
OST108711 OC19235 (Similar To: X75639) Thu Sep 30 14:38:14 1999
OST63927 OC10092 (Similar To: AA624381) Thu Sep 30 14:38:14 1999
OST108378 OC19252 (Similar To: AC003060) Thu Sep 30 14:38:14 1999
OST108487 OC19266 (Similar To: AA285852) Thu Sep 30 14:38:14 1999
OST51781 OC8569 (Similar To: AU067347) Thu Sep 30 14:38:14 1999
OST108528 OC19273 (Similar To: AA124579) Thu Sep 30 14:38:14 1999
OST108582 OC19280 (Similar To: AI449172) Thu Sep 30 14:38:14 1999
OST108619 OC19284 (Similar To: AV008931) Thu Sep 30 14:38:14 1999
OST108660 OC19289 (Similar To: AA960383) Thu Sep 30 14:38:14 1999
OST108670 OC19290 (Similar To: AA254130) Thu Sep 30 14:38:14 1999
OST108798 OC19307 (Similar To: AI173382) Thu Sep 30 14:38:14 1999
OST108839 OC19318 (Similar To: AI527902) Thu Sep 30 14:38:14 1999

FIGURE 2

OST108852 OC19319 (Similar To: AA107210) Thu Sep 30 14:38:14 1999
 OST109111 OC19350 (Similar To: AA497714) Thu Sep 30 14:38:14 1999
 OST109139 OC19355 (Similar To: AA013820) Thu Sep 30 14:38:14 1999
 OST109202 OC19369 (Similar To: AI509495) Thu Sep 30 14:38:14 1999
 OST109222 OC19373 (Similar To: AI663991) Thu Sep 30 14:38:14 1999
 OST109276 OC19384 (Similar To: AE000664) Thu Sep 30 14:38:14 1999
 OST109359 OC19395 (Similar To: AI385985) Thu Sep 30 14:38:14 1999
 OST109402 OC19405 (Similar To: AF016913) Thu Sep 30 14:38:14 1999
 OST109417 OC19407 (Similar To: Z22593) Thu Sep 30 14:38:14 1999
 OST81392 OC16350 (Similar To: AI037215) Thu Sep 30 14:38:14 1999
 OST109618 OC19432 (Similar To: D77463) Thu Sep 30 14:38:14 1999
 OST109671 OC19437 (Similar To: AF020194) Thu Sep 30 14:38:14 1999
 OST109687 OC19442 (Similar To: AF057525) Thu Sep 30 14:38:14 1999
 OST109701 OC19444 (Similar To: C80530) Thu Sep 30 14:38:14 1999
 OST109745 OC10003 (Similar To: AF036007) Thu Sep 30 14:38:14 1999
 OST109764 OC19455 (Similar To: AA919916) Thu Sep 30 14:38:14 1999
 OST109799 OC19463 (Similar To: L20334) Thu Sep 30 14:38:14 1999
 OST109825 OC19469 (Similar To: AI550719) Thu Sep 30 14:38:14 1999
 OST109845 OC19472 (Similar To: AI019450) Thu Sep 30 14:38:14 1999
 OST109864 OC19476 (Similar To: AF032968) Thu Sep 30 14:38:14 1999
 OST110008 OC19499 (Similar To: AA270956) Thu Sep 30 14:38:14 1999
 OST110020 OC19500 (Similar To: AA270956) Thu Sep 30 14:38:14 1999
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 OST110102 OC19508 (Similar To: U41663) Thu Sep 30 14:38:14 1999
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 OST110509 OC19552 (Similar To: AA544635) Thu Sep 30 14:38:14 1999
 OST110552 OC19561 (Similar To: AA271370) Thu Sep 30 14:38:14 1999
 OST110576 OC19567 (Similar To: AU066666) Thu Sep 30 14:38:14 1999
 OST110611 OC19570 (Similar To: AA762868) Thu Sep 30 14:38:14 1999
 OST110689 OC19580 (Similar To: AI587764) Thu Sep 30 14:38:14 1999
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 OST110895 OC19610 (Similar To: J05261) Thu Sep 30 14:38:14 1999
 OST71835 OC7372 (Similar To: AF061270) Thu Sep 30 14:38:14 1999
 OST110972 OC19619 (Similar To: L20257) Thu Sep 30 14:38:14 1999

FIGURE 2
 12 of 14

OST90943 OC17283 (Similar To: AI049328) Thu Sep 30 14:38:14 1999
OST110989 OC19624 (Similar To: AI527648) Thu Sep 30 14:38:14 1999
OST111097 OC19640 (Similar To: X01815) Thu Sep 30 14:38:14 1999
OST111142 OC19646 (Similar To: D31720) Thu Sep 30 14:38:14 1999
OST111550 OC19676 (Similar To: AF017128) Thu Sep 30 14:38:14 1999
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OST111760 OC19711 (Similar To: X72310) Thu Sep 30 14:38:14 1999
OST111762 OC19712 (Similar To: AA956723) Thu Sep 30 14:38:14 1999
OST111794 OC19718 (Similar To: AC004407) Thu Sep 30 14:38:14 1999
OST111803 OC19720 (Similar To: AA261345) Thu Sep 30 14:38:14 1999
OST111812 OC19723 (Similar To: U46923) Thu Sep 30 14:38:14 1999
OST111814 OC19724 (Similar To: AA289238) Thu Sep 30 14:38:14 1999
OST111900 OC19735 (Similar To: AA087828) Thu Sep 30 14:38:14 1999
OST111899 OC19736 (Similar To: AF109905) Thu Sep 30 14:38:14 1999
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OST111939 OC19744 (Similar To: AI450126) Thu Sep 30 14:38:14 1999
OST111953 OC19746 (Similar To: S79780) Thu Sep 30 14:38:14 1999
OST112078 OC19757 (Similar To: AC002327) Thu Sep 30 14:38:14 1999
OST112163 OC19771 (Similar To: AA030332) Thu Sep 30 14:38:14 1999
OST112256 OC12708 (Similar To: AF146793) Thu Sep 30 14:38:14 1999
OST112342 OC19798 (Similar To: AA691518) Thu Sep 30 14:38:14 1999
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OST112829 OC19882 (Similar To: AA915350) Thu Sep 30 14:38:14 1999
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OST112984 OC13929 (Similar To: AA139050) Thu Sep 30 14:38:14 1999
OST112989 OC19902 (Similar To: AA178100) Thu Sep 30 14:38:14 1999
OST113002 OC19905 (Similar To: AI613716) Thu Sep 30 14:38:14 1999
OST112788 OC19875 (Similar To: AB003594) Thu Sep 30 14:38:14 1999
OST112639 OC19842 (Similar To: AF061947) Thu Sep 30 14:38:14 1999
OST112152 OC19768 (Similar To: AI179057) Thu Sep 30 14:38:14 1999

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OST111075 OC19636 (Similar To: AI614473) Thu Sep 30 14:38:14 1999
OST107399 OC19109 (Similar To: AF076183) Thu Sep 30 14:38:14 1999
OST106871 OC19038 (Similar To: AB015206) Thu Sep 30 14:38:14 1999
OST106363 OC18970 (Similar To: AV043980) Thu Sep 30 14:38:14 1999
OST104364 OC18723 (Similar To: AV040390) Thu Sep 30 14:38:14 1999
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OST95955 OC6479 (Similar To: AI179057) Thu Sep 30 14:38:14 1999
OST82948 OC4295 (Similar To: W61977) Thu Sep 30 14:38:14 1999
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OST106660 OC18994 (Similar To: AF142676) Thu Sep 30 14:38:14 1999
OST111079 OC19638 (Similar To: AU017122) Thu Sep 30 14:38:14 1999
OST109199 OC19368 (Similar To: AV033092) Thu Sep 30 14:38:14 1999
OST105433 OC18869 (Similar To: AI060721) Thu Sep 30 14:38:14 1999
OST105265 OC18855 (Similar To: AI551992) Thu Sep 30 14:38:14 1999
OST105096 OC18834 (Similar To: AA789411) Thu Sep 30 14:38:14 1999
OST104809 OC18793 (Similar To: AA185189) Thu Sep 30 14:38:14 1999
OST101066 OC18289 (Similar To: AA061252) Thu Sep 30 14:38:14 1999
OST99179 OC18036 (Similar To: AI118981) Thu Sep 30 14:38:14 1999
OST99123 OC18029 (Similar To: AI226320) Thu Sep 30 14:38:14 1999
OST99043 OC18016 (Similar To: AA120641) Thu Sep 30 14:38:14 1999
OST94675 OC17585 (Similar To: AA575242) Thu Sep 30 14:38:14 1999
OST102943 OC10811 (Similar To: AI103588) Thu Sep 30 14:38:14 1999
OST41571 OC9717 (Similar To: W89289) Thu Sep 30 14:38:14 1999
OST77030 OC6255 (Similar To: AA763743) Thu Sep 30 14:38:14 1999

PATENT APPLICATION

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

ATTORNEY DOCKET NO. LEX-0051-USA

As a below named inventor, I hereby declare that:

My residence/post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Novel Mutated Mammalian Cells and Animals

the specification of which is attached hereto unless the following box is checked:

☐ was filed on _____ as US Application Serial No. or PCT International Application
Number _____ and was amended on _____ (if applicable).

I hereby state that I have reviewed and understood the contents of the above-identified specification, including the claims, as amended by any amendment(s) referred to above. I acknowledge the duty to disclose all information which is material to patentability as defined in 37 CFR 1.56.

Foreign Application(s) and/or Claim of Foreign Priority

I hereby claim foreign priority benefits under Title 35, United States Code Section 119 of any foreign application(s) for patent or inventor(s) certificate listed below and have also identified below any foreign application for patent or inventor(s) certificate having a filing date before that of the application on which priority is claimed:

COUNTRY	APPLICATION NUMBER	DATE FILED	PRIORITY CLAIMED UNDER 35 U.S.C. 119
			YES: _____ NO: _____
			YES: _____ NO: _____

Provisional Application

I hereby claim the benefit under Title 35, United States Code Section 119(e) of any United States provisional application(s) listed below:

APPLICATION SERIAL NUMBER	FILING DATE
60/157,651	10/4/1999

U.S. Priority Claim

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

APPLICATION SERIAL NUMBER	FILING DATE	STATUS(patented/pending/abandoned)

POWER OF ATTORNEY:

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) listed below to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Lance K. Ishimoto, Reg. No. 41866

Send Correspondence to:

Lance K. Ishimoto
Lexicon Genetics Incorporated
4000 Research Forest Drive
The Woodlands, TX 77381

Direct Telephone Calls To:

Lance K. Ishimoto
(281) 362-6554

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

**DECLARATION AND POWER OF ATTORNEY
FOR PATENT APPLICATION (continued)**

ATTORNEY DOCKET NO. LEX-0051-USA

Full Name of Inventor: Glenn Friedrich

Citizenship: Canada

Residence: c/o Breland & Breland, Houston, TX 77004

Post Office Address: Same

Inventor's Signature

Date

Full Name of Inventor: Brian Zambrowicz

Citizenship: USA

Residence: 18 Firethorne Place, The Woodlands, TX 77382

Post Office Address: Same

Inventor's Signature

Date

Full Name of Inventor: Arthur T. Sands

Citizenship: USA

Residence: 163 Bristol Bend Circle, The Woodlands, TX 77382

Post Office Address: Same

Inventor's Signature

Date

SEQUENCE LISTING

<110> Friedrich, Glenn
Zambrowicz, Brian
Sands, Arthur T.

<120> Novel Mutated Mammalian Cells and
Animals

<130> LEX-0051-USA

<150> US 60/157,651

<151> 1999-10-04

<160> 574

<170> FastSEQ for Windows Version 4.0

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<213> Mus musculus

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cggccccccg	ctgggtgcac	actcgcacgc	acaccctcgc	accatacccc	gcacacncgg	180
gagcacacgc	acaggtantc	agtcacacac	caagggcagc	agcgacggcg	gacnaaacat	240
gctccggtgg	cattgcaacc	ccccacccc	cgccatccaa	ccttgcaatt	cntttgcagt	300
cagaccccaa	accccacacc	ttccccggag	ccccctcca	taaaaaantg	ccttcccccc	360
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gcaaatgctc	catcaaaagg	gc				442

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<211> 238

<212> DNA

<213> Mus musculus

<400> 2

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aagtgataat	agagaagaca	aagatcctgc	aaaccaaaga	aaacaccaga	atTTTTTcct	180
ccatgaagat	ggacaaaact	taaaccaa	ttaaagtttct	tgattaaatg	caaacact	238

<210> 3

<211> 310

<212> DNA

<213> Mus musculus

<220>

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acctggactt	caagcctgaa	gaccagcccc	atdddtagat	aaaggacgaa	ttctgatgtc	180
tagctgagaa	gcagccggtt	ctagggagaa	gtgaggggac	aggagttaag	tgccccctcg	240
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aaaaaaaaaa						310

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 <213> Mus musculus

<400> 4						
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cgcgccacac	cgtcgatccg	gaccgccaca	tcgagcgggt	caccgagctg	ctgatgcaga	180
gaattgagca	gctttaaatt	tagatttcaa	tatttgagag	aaatcagtaa	atgttcatac	240
tcgttaacta	tgtcaaactt	tttattttat	aaaatatagt	ctgctaatat	gtatattggc	300
ataagaattc	ccaacagcat	tttatgactc	cttgggttta	aaacctcagt	attaaattta	360
tcagtgtttg	tggtgcagca	catttaagtt	caacatagtc	cacacatttt	gttggaagaa	420
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<210> 5
 <211> 283
 <212> DNA
 <213> Mus musculus

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gttttgcatt	tttattgtta	gtcctcaaacc	atggaagttt	gaacttaaaa	tgctgaagaa	180
gcaatgcaaa	gatatctaatt	cagcattcgg	gacaccttgc	cactcttact	tttcttttaa	240
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<210> 6
 <211> 252
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(252)
 <223> n = A,T,C or G

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tctcnatgct	gctntccagg	acanacgcnn	anaggnagng	agcttttgaa	tcacccccctt	180
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<210> 7
 <211> 318
 <212> DNA
 <213> Mus musculus

<400> 7						
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ataggtacta	acagtcagg	acaatagcaa	acaccaacca	tgaatcagta	gcagtggcaa	180
gatccagcag	aaacagcaag	actccatcga	atcggcacaa	gtcaacggaa	gacgccagaa	240
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<210> 8

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<211> 411
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(411)
<223> n = A,T,C or G

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gtcggggtgc caagaaaaca ggcattctata cttctgatag gaagtttgtg caaataaaaag      180
aaatggttcc agaatttgtc gtcccggact tgacggggtt caagctcaag ccctacgtta      240
attaccgagc tcctgcaggc atagacacac ctctgaccgc caaagcgctc ttccaggaaa      300
cagttgcacc cgctatcgaa aaagacttta aagaaggac atttgatgct aacaacctgg      360
agaaatccgg tttnaancca cacaggaagg caagctggtc caatatatcc t              411

<210> 9
<211> 579
<212> DNA
<213> Mus musculus

<220>
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<222> (1)...(579)
<223> n = A,T,C or G

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gaaccacttt ctcttctcag ggtctcagaa tggcctagta catatctgga gcctacaaac      180
aagaagaata gttaccactc taaatggcca tggggggccag ggtgtaatct ggctgaagac      240
actgccacag ggacaccagc tcctcaggca gggtcganac ctgcggctgt gcctgnngga      300
cctggaggan ggcaggaaca ccatcatgga ctcanntnag ntggacagtg tgggcttatg      360
caggggctcc atcctgggtc ggggacagca gtgctggatg cttgctgtgc canggaaggg      420
cagcgacgaa gtgccacctg cgttaganat gaanggccaa gaagctgagt gacctncaaa      480
gaggaagact acttgntnca tggcttnagg ntggntcatc cnctgaancc tcagagnngc      540
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<210> 10
<211> 236
<212> DNA
<213> Mus musculus

<400> 10
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gtcacacagt tagcgctgaa tgacaagggc cagggtgatg cttgggggtct cgactctgac      120
ggacagcttg gcctacaggg atcagaggaa tgtatcagag taccaggtta acaaagggtga      180
ccgcacagag gtccttaagc ttctataata aatttatcta tctaaatcaa aaaaaa      236

<210> 11
<211> 375
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(375)
<223> n = A,T,C or G

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ggcccaggcg	ctcctgggtg	ggttgctgac	cctggacaaa	gactaaacac	tgcaggggat	240
tcatccttga	gagagagagg	atgctgtgcg	cctttgagac	tcaccaaagg	cttgctttat	300
taatttgtct	gtttagtttt	gggaaattct	ctacaattaa	aataatttgn	taaaaatggc	360
ctttcctacc	ttggg					375

<210> 12
 <211> 404
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(404)
 <223> n = A,T,C or G

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gagtgtaggg	tccccacgca	gaagtccctat	agttccagng	aaaccttgaa	agctttcgat	240
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gacgagtata	ctanacaagg	acngaatttt	accctaaggc	agttaggagt	gtgtgaatcc	360
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<210> 13
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 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
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 <223> n = A,T,C or G

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atccctgcta	ctccgccatg	tttggggcca	aaggtcttgg	gcgaggtgga	gctganagcc	180
acactttcaa	gtagaccgag	gttgtggaaa	ctctccctgc	ccgcccaggc	acatgccagg	240
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<210> 14
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 <212> DNA
 <213> Mus musculus

<220>
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 <222> (1)...(336)
 <223> n = A,T,C or G

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ggaaggtgcc	attncnagg	tggncaacct	tntgntatnt	ntgtatgcca	nggagaccgt	240
aagcttctaa	tgctctnngc	taacgccccat	gccctggtgc	antacctgga	ggaacccctc	300
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<210> 15


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<211> 280
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
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<223> n = A,T,C or G

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gttcttncct ttttgaagan cttaaancct agganccctt ngctctgtcac accaggcctg      180
gggctggggg acagaaccgg agcacacacc ccctacanct gtcangnggg ggatggaacc      240
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<210> 16
<211> 329
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(329)
<223> n = A,T,C or G

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angagngctg ataaaagaag tnaagctttg aaaggtcctg caccttgccc atggccatca      180
ctaactgctc cgaatccaca agatgaagac gtcgggctaaa cttgagcaag ctttggttaga      240
tggggaacatg gaacatcact gtacacttat ctaagtacca tttataatgg tggcattaat      300
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<210> 17
<211> 374
<212> DNA
<213> Mus musculus

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<222> (1)...(374)
<223> n = A,T,C or G

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ccacatgcc aactgctctg gagtcgccgg aggcacagc agatcccagc cgagccttga      180
gagaggactg tgatctgcct tacgggtcac ctactcagg actcagcgct cgcacgttgc      240
agcagctcca gacccactg ntaccggaaa gttacaggta ccggaaccga gaagaccaag      300
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<210> 18
<211> 396
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<223> n = A,T,C or G

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ataggattaa atttacctcc aataaactga acttgattgt taaagcaata atatttttagg 180
gccaaagtgt tcagataatc accacaagta ttacatatt ttcaacagct ctatcttcct 240
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tnaattaagn atttaatttt ctaaaaagta aatggg 396

<210> 19
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<212> DNA
<213> Mus musculus

<220>
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<223> n = A,T,C or G

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<210> 20
<211> 427
<212> DNA
<213> Mus musculus

<220>
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<222> (1)...(427)
<223> n = A,T,C or G

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aaaaaaa 427

<210> 21
<211> 362
<212> DNA
<213> Mus musculus

<220>
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<222> (1)...(362)
<223> n = A,T,C or G

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aa 362

<210> 22

<211> 330
 <212> DNA
 <213> Mus musculus

<400> 22
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 aaatttagat ttctgcatga ataaaaaaaa 330

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 <211> 535
 <212> DNA
 <213> Mus musculus

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 cttcctgaga tgatgtcatg tgtaaacact gcttcggctt cgtaggctttc atggttttca 480
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<210> 24
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 <212> DNA
 <213> Mus musculus

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 ctgagagctc caagctcgaa gctggagaca agaagcctga aaccaagtaa cttcaaaaagc 180
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 attc 244

<210> 25
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 <212> DNA
 <213> Mus musculus

<400> 25
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 aggatatttc aagcatgct 439

<210> 26
 <211> 107
 <212> DNA
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 <222> (1)...(107)

<223> n = A,T,C or G

<400> 26

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<210> 27

<211> 256

<212> DNA

<213> Mus musculus

<220>

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<222> (1)...(256)

<223> n = A,T,C or G

<400> 27

gctttagcaa aacaatcaac aatccagtaa gttgctgtat gattggaggc atatgcaggt 60
atctgtgcaa gggcaacatt cttcagaatg gcaattgtgg agttactagt ctcaactgct 120
gcaagagaaa atagagaaga agtcaaagat ncagtgaacc naagaaaaca atttgcacct 180
ccatgaagat gaaccaaaca taaactaaat taaagttcct tgattaaatg caaacgcatg 240
ttggtaaaaa aaaaaa 256

<210> 28

<211> 135

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(135)

<223> n = A,T,C or G

<400> 28

cagaatggct gatacctgca aaatgaaata ctnagtgtng gacagccctt tgnggaanat 60
ggagctgtct ggctgtgagc gaggnctgca tgggatacgg ntgctcactg ggaanacccc 120
aaacactgac tccgc 135

<210> 29

<211> 186

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(186)

<223> n = A,T,C or G

<400> 29

acgtcagttc acaatgccag ncctggaant gagttactgc anaggaaaaa accacacata 60
gcctatgaga gcagtgaagg ggtggagaga anaggtggat gtccccctta cttcnaacat 120
gcttttgaca cacaccaact tnngngnttn gatctggtgc aaattaaaag accaatgtga 180
gatatg 186

<210> 30

<211> 335

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(335)

<223> n = A,T,C or G

<400> 30
gacatagtct gtggtgagtt ggaagaaggt gaactggaag acgacggggc tgaggaggtc 60
caggaccccc ctggaggaca agagaggagt cggaaggaga agggggagaa gcaccacagc 120
gactctgagg aggagaagtc tcaccggagg ctgaancgga agcgggaagaa ggagcgggag 180
aaggaaaaga ggcgctcgaa aaaaaggcgg aaatctaagc ncaaacgcnn tgcttcctcc 240
agcgatgact tctcgngact tctcanatga ctcanatttc anccccagtg agaanagtcc 300
cgcaagtacc gggactntag tcccccatag gcacc 335

<210> 31
<211> 144
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(144)
<223> n = A,T,C or G

<400> 31
tcttgaagcc cagaacatga tnaaggggtt ttcgggctcc ttgaatataa ctctacaatc 60
gagcttcatg gtgcaaggca cgagtgatcg ggtntcgtcc anaagggtga acctaataa 120
gtaaatnccc ttgtgcccat tacg 144

<210> 32
<211> 138
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(138)
<223> n = A,T,C or G

<400> 32
ttaaattgaga gactcacnga nctgcacttt ccgcaaaagn ccnaatgng ggccccgtac 60
cctctgtacc cagcgganat agnggcctgc tcttntcct cctgccgctt tcacctaccc 120
ngcttcaactg gatgccca 138

<210> 33
<211> 480
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(480)
<223> n = A,T,C or G

<400> 33
gactgagctt agggcngtct aagaataatg ctatnataaa cagccgacct tantgcaaag 60
atattggcgt ttccaagaca acaagataca agatatatgc tttggagncc taggagaatc 120
ttggattcaa agacctgtan nggncagga ctacagtga ggtcaagagn ttgcagcaag 180
angactcatt natagaagga gtgancgacc aangccttgt ggctgtggtg ntcagcttgn 240
cgntgaccgn tactntcctg tatgcacttn tcagaaatgt ncnnctgaa catncatcca 300
taaaaccang agctaggcng agtgcttcna gaacaatncc naacagaaca ggatgtgnct 360
gtccttgccc gacagcagta tctacactga aatgnnctgt ccaatctgct tacatcaagc 420
ctcctttcct ngttgaaaca aactgtggac atctcttttg tgggtctgct aattgcatac 480

<210> 34
<211> 219
<212> DNA
<213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(219)
 <223> n = A,T,C or G

<400> 34
 tcactaccgc gtgttccaca ccattagtca nngagggctc actctaggac acaagctanc 60
 ctaggactgc tngaggnccc tncagcaaga cgannnggtgc ttngnganaat tttntcccca 120
 tgtgnggntg aatangctgg aannncactt ttatcaccat ctgacccatt aggaccttgn 180
 naacatagaa ttaaaagcga ntaatctgga aatctcaca 219

<210> 35
 <211> 152
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(152)
 <223> n = A,T,C or G

<400> 35
 cttatatatt gatgccaaaa taggancatg gtgnngcnga cnnnaaggg canctctgga 60
 ggcaaccctt atgccaatgcg ttggaaacan caccgngcc tctggnaaga anccgggnag 120
 aggaaccatg gangaggatc ctatggatgt ct 152

<210> 36
 <211> 201
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(201)
 <223> n = A,T,C or G

<400> 36
 actgagggaa ctgcagcaac aaggaatgcc tggtcctgca cttgaagcca gttctcaagc 60
 tccaggactg cccgtggtat aaccaaggg tctgcaagga aggtccccctg tgtaaatacc 120
 gccatgttca tcaagtactg tgtnccaact acttcaccgg cttctgcccc gagggacctc 180
 agtgccaatt tgggcaccat a 201

<210> 37
 <211> 219
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(219)
 <223> n = A,T,C or G

<400> 37
 gggggcggaa agcgaaaacc actccaggnt ntnnctttgc tttgcgtton ctggatccac 60
 ccccacgcct ggtaaggnc aagcaaccat ggcaggact agagggagag taaggctata 120
 gaagccaatg gagggagggg actcatggaa agntggccca aacccaacct gacccacac 180
 tggcaccttg ctagcccaat aataaacatt ttgctgatc 219

<210> 38
 <211> 289
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(289)
 <223> n = A,T,C or G

<400> 38
 gaggactttg gaaatcctaa atggccnagc tactgcaatc tccacccagg ttccttcctg 60
 aggagtggta tattgctaac aaaagccagt accanagagc aagaggncctc ataaggtccc 120
 tgnnnctaga acgcttggtt ggcannagag ccagaaggct tngtngngaa gaaattgaga 180
 agaccaccag gaagtctnag tagcgacgtg aacaangaaa ctttgngnca gagactntga 240
 gngaggggtca agngttctcg ggaagnaagc nnttacaatg acaaaactt 289

<210> 39
 <211> 138
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(138)
 <223> n = A,T,C or G

<400> 39
 gccataatta cttcttggtg aactctcnga ggtcggacng gagangtgac atggntcctt 60
 anattnacat gtgcttacgg agaaacnggn ggtgcgtctg aanagcccag aacacagtct 120
 cggagagtct ggcccccg 138

<210> 40
 <211> 129
 <212> DNA
 <213> Mus musculus

<400> 40
 taagcctggg tggcaacctt caggtggcac tggaaactac ctggttcctg gacatgcccc 60
 gtagaaggcg ggggtcccag cggcagcagc taaggtaagg gatattaaat gtatccataa 120
 acaaaaaaaa 129

<210> 41
 <211> 223
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(223)
 <223> n = A,T,C or G

<400> 41
 actgaggtaa cattcaggaa tcctgggntg atgatacatc agccttcggt tctctcagcc 60
 agccagaaca agtacaaatt ggtagtgctc cttagacatat gttttgtttg ttaatgaggt 120
 gggggtggtc acctttatga cagctgtggt ttcaggcagc tagctggctc acttagcatt 180
 tctgcttggt ttatTTTTtag cttgctagtt aaataaagaa aaa 223

<210> 42
 <211> 482
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(482)
 <223> n = A,T,C or G

<400> 42
gactgaggggt tttgcggcct ccaggtggtg ggtccaatth ttcatlaggc tttgatgagc 60
cagcagaaca gcctgtgagg aagaacaaga tggctttctaa catctttggg acaccggaag 120
agaaccccc atcttggggc aagtcagcag gttccaagtc tagtggtggc agggaaagatt 180
cggagtcgcc tggaacacag agaagtaact cttctgaagc aagctctgga gatttcttag 240
acctcaaggg agaaggtgat atgcatgaaa atgtggacac agacttccaa gccaacctgg 300
cgcagatgga ggagaagcca gtgcccgtg ctcctgtgcc cagcccagtg gcttcagccc 360
cagtgccatn caggagaaac cccctggcg gcaagtccag cctgggtcttg ggtagcttc 420
ttgngttgga actctgncct tttgncctgnc tggttggtgg cccatgcttg ggaactgcac 480
ag 482

<210> 43
<211> 379
<212> DNA
<213> Mus musculus

<400> 43
ctgagttaca ggatgttaga tccggtacag aagagaatga ggaaaagcta cttatcagag 60
gaaagatcac cgatcactgg acaaatcgta accaggctct ggacctgcaa cattccaacc 120
tctccacaca gcgcgggtggc tctgattggc cttcaacct ttacaaacac agctgctttc 180
taggaatgcc ctcccacact agcaattcca tgcacctacg agctaagatc tggcatcttc 240
gagtgccatg caagcagaga ttcaaagtca atgtctcaaa actaaatcac tttttcttta 300
tcttgagaca cacattcttt ttctttgtt tgacaataaa ttaggatgct ttgttttttg 360
gctttttcaa aaaaaaaaa 379

<210> 44
<211> 487
<212> DNA
<213> Mus musculus

<400> 44
gactgagcat gaccctgcct ctctttaccc gccatgatgg atcagccagc tcagtaagcc 60
tgctcacacc tctttgtcct gacctggaag gaaagaaaga ctcgatgagc atgaggatca 120
gcacaccgtc tgccctcagc cctcccgcct cccgctgtgt ttctccatct ctgaggcatg 180
gcatgctccc atccatcccc actgcgggaa tgaaccacg tgcagcagct cttcaccccg 240
gggagtcgc atcgccacg tctttctagc tgtttaaaag tcaactagcc acaatctgga 300
gtgccttggg aagagagccc caactgacat tgcctaggtc aggtggtct atgggtgtgt 360
ctgtgagggg ctgactgttg atccatattg gaagaccag accaccattc cctgggcagg 420
tgaccctgga ctatgtaagt gaagaaaact tgctgaacat aggtggtgtaag caagcagtcg 480
ctccaca 487

<210> 45
<211> 458
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(458)
<223> n = A,T,C or G

<400> 45
ccgtaccgga agcatgaagc cagaggngcc atgcagaggn ccctgctgaa gctccaagct 60
cactgagctg ttagagcgcc tgcanagaga cagggangat ntgggttttt ttggaaacct 120
tatntttcca ctctttttag cagnatcan gctgatacct tgnacagatct tctgcctgcn 180
caagtgtctg cagccgtgtg actgnntgta cncaaactag gacctgncca gacgncagtg 240
angatnagtn nnntgnactt gctgccttng cctgancaan gctatnacac tgaggctggt 300
cactctgaag gccttcaagc tgagccgcat tcaactggga gcagcttcta cgggtgtaang 360
ataggatnat ctgctccacg cacggggtca ttgcaggnga agcacttggt gcaggnggcg 420
aaatccacta tactggtnga caaatgtgat ctaactac 458

<210> 46
<211> 174


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<212> DNA
<213> Mus musculus

<400> 46
gagcagcacc tggaatgcat agagaaccag gttccctttg gaaaatattc actcgtttcc      60
accagcccaa acccgaaggt accatcagta cgtgaggcct acaacagggt tctctgtttt      120
cctgtagcca gcctctctga tgctoccaa aatgtatttg aaaagcacct tgat              174

<210> 47
<211> 196
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(196)
<223> n = A,T,C or G

<400> 47
gactgagaaa aattttaagt gcctccttat gccaaaggaag ggccagggtt tggtatgactt      60
caactaacag tagagattgc tgtcctaggg actaagnnta cacacatgaa taaangacgg      120
aaattccagt taaaaggnaa aggagnncgt ggggcctant cncnnggtc angncncaag      180
gactaagtat cgacgc              196

<210> 48
<211> 548
<212> DNA
<213> Mus musculus

<400> 48
gactgaggta ttgtccaggg ctttctcaca gctcctaaag acggacctca gacgtgcac      60
acgtggacct ctgaaaaaac catggagctc attgctccaa agccaactgg agagcttctc      120
ccaatcctgc tgctgctgct gttacagctg cttacaacag ccattgtcgt ggctagagtc      180
ttatatccac tgtgacacca taggagaaat gattccactt ttgctgtctt acatgacct      240
ataaaaggag gcacatccca ttatactctc aaaccctgtc tgcactcagg gagaggttat      300
aacctcatta aggatctttg gagccatttt ttaggtcttg gcaaccatgg ttcttgaatg      360
ggtaactgct ggcagaacat gaaatccttc ctaaactgat tgtccacttt tttctttgac      420
attctcttga gaacagccac tagtttctca gtgtgcttag caaatatgaa tttacaatat      480
aatcaatat ggacattcat gtttcacaga cttcaaaatt acatctatga gcataattttg      540
gcacatag              548

<210> 49
<211> 208
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(208)
<223> n = A,T,C or G

<400> 49
tcagctggca tcaatcagga tcccatccct gagaggactg catcaactct tttggaaact      60
gtcttccca cttgatgcc tgcgctgtgc agcttctgaa aatgacanac agggaaacgg      120
caccctggcc atgganantg naangctngg ataactagan gattttcttg gaacagatan      180
gncctttccc tagtgccata gaaaacaa              208

<210> 50
<211> 104
<212> DNA
<213> Mus musculus

<400> 50

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gcacacgcc	ttcacgctgc	tcaagggcag	gtcggcacca	gtatcagggg	cttcggcacc	60
tgcaggaatg	tcaaattaaa	catctgttaa	tagtaaaaaa	aaaa		104

<210> 51
 <211> 239
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(239)
 <223> n = A,T,C or G

<400> 51						
ctagacgata	actctnnc	gagtgactct	cgncgaaaac	ngacagaaat	ggctncngga	60
tgagatggac	tctgactggc	gaancacctt	tgagcttgtn	acctagcagc	tggggccagt	120
gagaggngac	tnaaacnctc	ntgcctcagg	ntcttanaac	agnagtggcn	attgangctn	180
acanaataac	atgcctnttg	ggcaaggatg	atnggnctcc	tggctaattg	tcaatctag	239

<210> 52
 <211> 539
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(539)
 <223> n = A,T,C or G

<400> 52						
tgaggtagaa	gccctcattc	ttcatctacc	cttttttcag	tatctggcac	caattctggc	60
cccatacatt	gtggcccatg	gctcttggtg	tatgccgaag	atttacaggc	agtttctgtg	120
gaacatttcc	ctgtccacct	ctaataaagc	cccgtcaaac	aagaacatgt	gattttgctc	180
tgactgcaa	gaagatcagc	acagactcca	gaatgtcagc	cgctctcaag	ctattagaac	240
ctttaaagta	caaagcacct	tgtaatcctg	cttaccgtgc	agcccaaagc	gtggcccat	300
ggcacatggg	aaacatcacg	ccacacgggg	gacagacgct	ccctgaatgt	aatagctcct	360
gccatcttgc	cagaaaagtg	aagaacgttg	gtgggtaccac	ccttcctcgg	agaaccttca	420
cagccagcag	tgcccacctg	ggtttgagtg	tcaacaaagc	ttctaccctt	aatgccagca	480
cactgcatnc	agactcatcc	agtgcctggag	gagggtgaaga	ggatgtagag	ggctttgat	539

<210> 53
 <211> 181
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(181)
 <223> n = A,T,C or G

<400> 53						
actgaggtct	ttggatgcag	cccagggncg	caccaaataca	tgaagatctg	ccttaattcta	60
ctgcgtcagt	gctcggacta	aaagactgtg	ccaacacacn	annctatcat	gaaacttttt	120
ttgtcngng	acaggatctn	gatagaacag	gctggccctc	aactggggtg	gctagtagag	180
g						181

<210> 54
 <211> 203
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature

<222> (1)...(203)
 <223> n = A,T,C or G

<400> 54
 cctatgtgag aagctcngag ggtgangcac cgtttcgaac tctgcagtgt gcaatgaaga 60
 cgaggaagtt ccagcatggc ctcgggggat gttggctaag ggacagagcc cgaaagagtc 120
 cttcacagag accacatatt tatctccctg gatgctttat aggccttaat aaaaaaatat 180
 caaaatagtc tataaaaaaa aaa 203

<210> 55
 <211> 238
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(238)
 <223> n = A,T,C or G

<400> 55
 tgccctccatc acttgcaaag aaattgttcc catgggtgnta cttgncattc tatttcccaa 60
 ttactctacc gccctcctac ttggcatgtg nttgccagn tcacaggaga tggactatatt 120
 attaaaantc ctgaatcaga gaaataggga tctcaccagc ttgntgccag gaggaaggga 180
 ancatgtctc accanaacac agctacatcg cctaantcag gatgaaaact ttatttta 238

<210> 56
 <211> 133
 <212> DNA
 <213> Mus musculus

<400> 56
 ggaggctgat ttttctttgc actggacacc accctgttag ttcctttggg caatggggaa 60
 gtccctgtctg cgggctggat cttctaaaag caaaagtatt aaatgttta gagttttcct 120
 ttaaaaaaaaa aaa 133

<210> 57
 <211> 292
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(292)
 <223> n = A,T,C or G

<400> 57
 ggccatggct gggcttgnac ttccctcctgc agtccgggan gatcctcttn cctcagccct 60
 caaggnagct gngacgatag gccngaccta ccatgccagc ctgattcccg tgaaactttg 120
 ngaacciaan acttntgctc tnataangag cttaacantt cttntctgtnc aaancttggg 180
 ctanaaatgg ngtngtggtt gangactatg ncaaagaatc tcaggcccna ggatgtcatc 240
 gaggaatact tcaagtgcaa gaaataaata aatttttggt gaaaaaaaa aa 292

<210> 58
 <211> 496
 <212> DNA
 <213> Mus musculus

<400> 58
 ctgagcccca cccagacaa ctccctcatg ggcttcgtgt ccgaggagct caatgagacc 60
 gagaagcagc tcatcaaaga tggcaaggcc agcaacatgg cgggtggtgta cggcaaggag 120
 gcgagtatct ggaaggtgag cccagcaag cccactgcca accacaccgg ctccaatgcg 180
 ggccataccc acaacacttg ctgagtgtgt gtcacaccca cgccagtacc agacacattc 240
 actgtacctt ctgtgccttc acaaggacag gccacagccc cttctgacac aagccgtgtc 300

cacgcgactg	ccaccaccac	ccaagcatag	gccacagcca	cacagatcat	ctgcatgcca	360
gcgctggaca	cgcctaccgc	acctggttct	ggtgctgata	acccccataa	ccaggaaggc	420
tccagccaca	caatgacagg	gcttacctag	ccaaggccat	gcctctgcag	tccatgcctg	480
aagctgcagg	cacagg					496

<210> 59
 <211> 172
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(172)
 <223> n = A,T,C or G

<400> 59						
gactgaggtg	ggtttggnc	gagtatacct	gngcaggagc	cataattact	tcttgtggaa	60
ctctcaaang	ccaggacagg	nggcctgggc	ttggctccat	ancncnatgg	cactnnaagg	120
tcacnacttt	ggctcgngaa	ttcccnagtg	atggggaata	tattttaaaaa	aa	172

<210> 60
 <211> 162
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(162)
 <223> n = A,T,C or G

<400> 60						
gactgagtc	cagaaatcct	ggntagggag	gcactttgac	caaggaggga	gtgtgtatat	60
attataccaa	gctccaaaga	ccctcacaga	tgtcttccag	gatgtcagat	ttgtcagcaa	120
cttgtcagat	gtttctgtgg	tcgtttggtc	aagaaaaaaa	aa		162

<210> 61
 <211> 163
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(163)
 <223> n = A,T,C or G

<400> 61						
gcaccaaact	tgagacgagg	gattgttct	ggcctctagc	cctcctcaca	cccagtttta	60
tttattgggt	tggctcttgc	tctgagaggt	ctaattctct	ctcaattctt	cctaaactgg	120
gctgcatgct	gnctgagcac	aggaaagata	gcaggaatgg	aag		163

<210> 62
 <211> 189
 <212> DNA
 <213> Mus musculus

<400> 62						
tgaggacccc	cacggcacga	gtattctgtg	gccagggcca	ccgcctcacc	ctcctctgca	60
gtctctgtca	cataggcatc	catggagggg	ctgtccaagg	cttctacata	actccagaat	120
tggaagatgg	tgaactgctc	ccccgggcct	gggtggggcc	tcctgggcag	cttctgtaag	180
aaaaaaaa						189

<210> 63
 <211> 124

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<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(124)
<223> n = A,T,C or G

<400> 63
agtttgacaa ccaaaatgag nacagacttt accnatatac atcgaggatg aagagacttg      60
ctcccagtag agaaccactg gtcttgntct ttaagagtct gttctgactt tcctaggacc      120
actt                                     124

<210> 64
<211> 229
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(229)
<223> n = A,T,C or G

<400> 64
tgagggtgggg tctttcaagt gcaaggcctg gtgtgtacaa caggatctct tagaaagaag      60
cacagctggtt ttcttgcagt ngcgggccccg gaaccacacg accggcagct ccagccccag      120
accacagctc gctggatttt cagaagttcc ttggggccaga agtgccagcc agatcactct      180
ttctctcagg tcacatatgg tacataaatc actttgcaaa agaaaaaaaaa      229

<210> 65
<211> 190
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(190)
<223> n = A,T,C or G

<400> 65
ataagcagat cctgggtgatg tgtgntcatt actgagagat tcctctccca cccacacaaa      60
ctgtatntac aggggtgggga cctgctggnc acaggcatgc caatactgtc tgaagactng      120
tatttgcattg anaccnttga cactgatcac ctctcanctc aggcctgact ccaaccacag      180
ggaggagatg                                     190

<210> 66
<211> 331
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(331)
<223> n = A,T,C or G

<400> 66
gactgagact tggagcaaga cttctttaca gcccacact gaggttccca ggtacgagnc      60
acaaggaagc catgtgattn ctgngtcgcc cagaggctct gcagcccctg cccctcctct      120
ccaccgagct cccttcacag gattgcacct ctgccagcca ggaggctgga gtgtagatgc      180
tctatgaggt ggctgtgcca gaagagccac gccaaaggcca tcttggagac tgaaaggagn      240
nngnttgcc cacactctat ccctgcccac gcacctttgg ccatgaactc cgtgacaata      300
aagatgggct cctgagagac caaaaaaaaaa a                                     331

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<210> 67
 <211> 239
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(239)
 <223> n = A,T,C or G

<400> 67
 gttccataat gggagtgggtg agcngggccc ccctactgtc accccgagga gcagtataca 60
 ctccggggcaa cggccctgcg gtccgtcatc atctttgctg gcttccagac agctccgatt 120
 cagacgtgga ggaagtgacc atggaagana nccccgtcat ctcccgacct ccccgagcga 180
 atctggcaaaa cctacgcagg ggctgggttag cctccccagg acccgggatc agtcaagaa 239

<210> 68
 <211> 112
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(112)
 <223> n = A,T,C or G

<400> 68
 aactgagaga ccctgggaga aggtcaacaa caagaatgan ttgagtnntt gnnnaatacc 60
 cnnccagggnn gtgttacaca cttnaagggc gtgggtcttg tgcttctcac tg 112

<210> 69
 <211> 113
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(113)
 <223> n = A,T,C or G

<400> 69
 agttaataag ggggngctg gcggacaccc tcagcctgac ngtgcatgga tcccgacttt 60
 gtcagatgga ctttinaagac ctatttcaat gaaatggttg agaataaaaa aaa 113

<210> 70
 <211> 617
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(617)
 <223> n = A,T,C or G

<400> 70
 ctccctggac acctcaagga agatggttct tcatctagaa ggccctccat caatagccag 60
 gtagcctgag ctacatgaca agatcccagc tcaagacaaa cagacctcat atctagtcac 120
 cataattatt gtttatttag acttgctccc tcctccctct gatttcccag gagcctgtgg 180
 gtatcctcag tctctgagaa aataacagcc agcatctggt acaggggctc tcggtgcttc 240
 tccagtgagg caggaacaga taaatgagaa aaggaaggaa tcaggttgaa ggcttccgct 300
 gccatcttgg atgaagaggg atccagaatc cagcctggag gtcattgtgat gctctcgaca 360
 tttccaaagt gcctcttgtt gcttctcacc acaaccaaga gatgcacaag gaaaggaagc 420
 ccataccctg tagtttgcaa gccccagtg tgccggggagg gacctgctca aggtcagaga 480

ggagcagaga	ggctggaaag	ccctgactcc	ctgggctaag	cctgggttca	ttctacttnc	540
ttcaccagct	tcgagtgcc	ctggaaacac	ctggcacgac	aatcgggaaa	taaaagaact	600
ncatggctta	aaaaaaa					617

<210> 71
 <211> 182
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(182)
 <223> n = A,T,C or G

<400> 71						
gactgaggtg	ggtttgggct	gaggnaaacc	tggncagcag	ncataannac	ttcttgagga	60
actctcaaag	gncgnacnnn	aggcaggnan	ctactgctgc	tcaccnttg	agagacttac	120
ccggtgcttg	cctgaactgc	aataaaggac	tcatattatt	gagcaggact	taaaaaaaaa	180
aa						182

<210> 72
 <211> 221
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(221)
 <223> n = A,T,C or G

<400> 72						
actgaggccc	aaggaagcct	ctcctctcct	gtttccagng	tgatcaatca	ccaatacaaa	60
ggagttcatg	tgacagctgg	gccacttita	atatgaagca	cttattgaat	tatanannaa	120
acatnccgtt	ctgnntgctc	agcgtccagg	acccccgagg	gaaggcacca	tctccacaga	180
aggnccaaca	tctttgtaga	agaaaagcca	actggggaca	g		221

<210> 73
 <211> 126
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(126)
 <223> n = A,T,C or G

<400> 73						
tggccttgaa	tttacagaga	tccacctgcc	tccttctcta	gagtgtctggg	attgaagcac	60
cactctgggt	aattacttct	ttgtaaataa	actngcacia	acgtcaccac	cacacacaaa	120
aaaaaa						126

<210> 74
 <211> 190
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(190)
 <223> n = A,T,C or G

<400> 74						
ggtgagaaga	ggagtttgaa	gtgtttactc	tggactatga	actgtgttgn	actgggatct	60

aggattcaag	tgctaaatgc	acagtccatc	cttgctttct	ttggatatatt	tgctcaagna	120
tgatatgtgtt	gggtttgagn	acttatattg	tagagtatgt	caaataaata	ttgatttacc	180
aaaaaaaaaa						190

<210> 75
 <211> 192
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(192)
 <223> n = A,T,C or G

<400> 75						
agactgagtc	ctggtacctg	ntgtngccgn	gttgcccttc	ctccctnctt	ntcanngggg	60
gantcccagg	gngaccgnnc	cagcctgcat	ttttggtgga	aaattagatg	gagtgagaag	120
ccccctgcgg	actcccagct	ggatggaaaa	gacaggagga	gaaaaggaca	aagacaaaca	180
ggaaaaaaaa	aa					192

<210> 76
 <211> 107
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(107)
 <223> n = A,T,C or G

<400> 76						
cccattatgg	gctccactat	gttggncgac	acctctgnct	cctgcaggag	atatcgggng	60
nggccngag	cctctgtcnt	taaactacct	catgctttta	acatcaa		107

<210> 77
 <211> 401
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(401)
 <223> n = A,T,C or G

<400> 77						
gactgaggct	tgactcccc	gggggntctg	cctctgcntc	tcttgccctc	gctgttggtt	60
ccctctctgt	ccagctcccc	tcccgnctct	gccctggaga	atggctcaaa	aggagaacgc	120
ctaccctgtg	ccctacggct	caaagacggt	aaggctcctg	ccacattccc	cgccccacgt	180
cccccggaag	aagagtccat	gaagatagag	gctggccttg	caaatggccg	gactctaagc	240
gtntncgacg	tgtgggcctc	aagaatttgc	ttgcaaaact	cagtctgatc	acttgacgtc	300
ttaccgtagc	agatgttgcc	aacctgaatc	tgagggtctc	cgtagagctg	agcctgctcg	360
tcacgtacaa	taatagttgg	gactgagcaa	acatcataaa	a		401

<210> 78
 <211> 127
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(127)
 <223> n = A,T,C or G

<400> 78
agaagaacaa cgtaananaa tgantgcttc tctggtaaaa cannggggag ggggntatta 60
accttcnagg atnctgtttt tcgcacttct catcannaag aatgggaatg tctcaatfff 120
gctcaga 127

<210> 79
<211> 145
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(145)
<223> n = A,T,C or G

<400> 79
ctgagtgtga tccctgggac ccacatgatg gaanagaana gagcaacctc ccataaactg 60
ncctctgact tctacaccaa ngctgtatgt agcatgtnc cacaacacctt catgcgcata 120
cacaacgaaa ataaaaagca aaaga 145

<210> 80
<211> 110
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(110)
<223> n = A,T,C or G

<400> 80
ggatttctagg gaatgacana atttcctgga ngatgaatgg agggngggna tgntaccctg 60
tgcctgacgn aggcantaac cgtgncagat ngtgacaatt tagaaaatat 110

<210> 81
<211> 322
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(322)
<223> n = A,T,C or G

<400> 81
tgtaaaggga aataagggac ggcctgaaca gacttcctgc tncnctgttt ggggnngggg 60
gngatggcca cagttaacaa aggcaaacca caactaagga aaaagggtaca tccagcantg 120
gctaattcca caacnaaagt catatcggaa gaaaagatgg ngtcgtttct ttactttnaa 180
nataacccag aggtcatant aaacaatang nggggagatc gaaaggctct gctatcacag 240
gntccagtgg caaaaggngag tgtgcagact tggggggcca naattgcatn ncaacgcaag 300
cagcattgca tgattttggc ac 322

<210> 82
<211> 108
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(108)
<223> n = A,T,C or G

<400> 82

gactgagcct	gcctggatgg	cagtgagcct	cagttcgttt	aggtcgtctc	tacctgttca	60
gcttcagtga	gcacaacacg	ggtaaacctn	tgcttgagct	cgagtcct		108

<210> 83
 <211> 277
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(277)
 <223> n = A,T,C or G

<400> 83						
actgaggtgt	gacgaagaac	agtctctgta	catgaagacg	aagacgactg	ctctgggctc	60
aggtatatct	naaccttggn	tctgatctgn	gagaaaaaga	gaccacctgg	atctggcatc	120
ccggnntttg	aatccaaaca	tcctctctct	gaggntnttt	ctcctnaggg	aagnttcccg	180
ctngncagct	tnganatcct	canaagagag	ccttgnattg	gaaacgtctc	cgttaaangc	240
gataacatgc	ccttcgntat	tcaccacaaa	aaaaaaa			277

<210> 84
 <211> 133
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(133)
 <223> n = A,T,C or G

<400> 84						
actgagaaag	ctgttttttt	taattttgat	tttctcaaga	cataaagtga	aggctgcttt	60
tcatctgtct	gcactatcgg	nntggngnn	ncganngcca	aactaaccgt	atataaccct	120
aggaaacttt	taa					133

<210> 85
 <211> 332
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(332)
 <223> n = A,T,C or G

<400> 85						
gggccttgga	gcctagaatg	acagcaaagt	aaaaccagtc	tcaactcctg	aaggctctcg	60
nnctgcacca	ggaatgcgtc	catagccaga	tcctgcaggg	gagacctgac	aagatgagag	120
acagcacaga	cttggaagcc	ccgcctcctc	tgtggatctg	aaggctcctc	tgtagaaaag	180
acaggacctg	gggcctgaga	ggcgaggccg	ctcaacaaca	gaacagctca	tgatgaagct	240
gagtctggcc	tcgaactcgt	ggacttgtag	ccctgagcaa	ccatgcctgg	cttggcttta	300
ctgttaaaaa	tacttctctg	taaaaaaaaa	aa			332

<210> 86
 <211> 327
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(327)
 <223> n = A,T,C or G

<400> 86
 actgagggca gcatcgagc cggcccaang gcaggggagc gcggggcaag ctcacttggg 60
 tcctggaaaag gccaaaggcg ctcagaagcc caccgcccag gacttgogac aagctgggag 120
 gcggccgaag acagtccttg ngagagatgc ccagnatccg gcggggcttg cttcgagat 180
 gcccgggtgcc canccagget gtccgctgag atgcccgtgc ggctgcttga tcggctcgga 240
 gcagcttccc ccaggaatga ctccagccgt ctgggaagca aggagggaca gggtttggag 300
 caataaatgt ccccaaggcc cgaaaaa 327

<210> 87
 <211> 182
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(182)
 <223> n = A,T,C or G

<400> 87
 accgaggact tcagggccct gnanaagact gttgaggaca tnaanntatt ctaanccacc 60
 ctctgtntct tctttctcct nctgtcccnc atnatnccca tggaaagcct tgccctggact 120
 attctntcat gcttnggaac tntctggatt tctacnctca nanacatgct ttgtactggc 180
 ta 182

<210> 88
 <211> 198
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(198)
 <223> n = A,T,C or G

<400> 88
 agatctcata cacagttgcc aaactgaatg ctgccatttc agaacgtgaa gaggntanag 60
 ggagannnga nctgnttnat cctgttanng tagactgnaa gctatggcaa aagagcnanc 120
 acaagagctg acaccagatg tnnacaangc ccatgagttc tcnacctgan gctngatact 180
 tcctaattag acgacaga 198

<210> 89
 <211> 409
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(409)
 <223> n = A,T,C or G

<400> 89
 gggattctag acctggatga catcctnngg gacggngctg atgacaaaga cagactggta 60
 gcagtatttg atgaacagga tccccaccat ggaggagatg gtaccagcgc cagctccacg 120
 ggaaccacaga gtccagagat attctggcag tgagctgggc accaacaata gtttctgctt 180
 ttcagcctta tcaagccaca agtgaaattg aggtcacgcc tttagttctt cgggcaaata 240
 tgccctcttga tgnccngccg gagcancgac ccagctttaa ctggcctttn cacttctgtc 300
 agtgatanca actnttctta agaggagncc tccaggaaaa accncgaccc gntgggtccac 360
 gacagctngn tttctcaagc aaacaccngc tgggaagtcc caaatcctg 409

<210> 90
 <211> 103
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(103)
 <223> n = A,T,C or G

<400> 90
 tgctaaatcc cacacagtaa taaatccggg acctcctgan acagntgnen cangagcnen 60
 nggctttatt nttgaagcac cttccacccc caacttcctt gac 103

<210> 91
 <211> 104
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(104)
 <223> n = A,T,C or G

<400> 91
 cctcatgcta atgtaatgca cggcncnnac cctgaccacg tgactactgg tgggccatag 60
 cnngtcacg ntgaagccct gcacaccctt gacctgagct ggat 104

<210> 92
 <211> 239
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(239)
 <223> n = A,T,C or G

<400> 92
 cagaagacat cccaccacat ggnccctgtg tttgtcctga tgagcgctg cctggccacc 60
 gcaggtaatg caccttctca attgggaggg tcttaacctt ctcttgaatt cctatttcct 120
 tctccctca gtctctttgg ctaaaaatat ttagtcata ttatcttatg taaaatgtga 180
 atatttatgt tatttaggta aataaaatat ttgactatca tactgataca taaaaaat 239

<210> 93
 <211> 322
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(322)
 <223> n = A,T,C or G

<400> 93
 gagtgtctggg acttgaaccc agatctcagt gtctactaca ttctcaaccc tgcttctcca 60
 aagacagcgt ctcanctata ctctgtagcc atgggtcagcc tgggaactccc aagagatctg 120
 cctccggagt gctgggatta aagatttcta ccactacacc gtggccttac aaacggaggg 180
 gataggacat catttaattc ctgaagagtt cctcagacaa tcagttctta ggccatccac 240
 aaactgatca cttggtttgt tgctctcctg aatgtggctt aatgaaatta aatgtagttt 300
 ctgccccagt gaaaaaaaaa aa 322

<210> 94
 <211> 359
 <212> DNA
 <213> Mus musculus

<400> 94

atccctgcgg	tgggtgggaa	ggagctggat	cttcacgggc	tctacaccag	agtcactact	60
ttaggcggat	tcgcgaaggt	ttctgagaag	aatcagtggg	gagaaattgt	tgaagagttc	120
aactttccca	gaagttgttc	caacgctgcc	tttgctttta	aacagtatta	cttgcgagcc	180
ctgggtccag	tgcccagcat	ctcatagccc	agatctgggtg	gcacatgcct	gtgattacag	240
cactgggaaa	gacatgagag	cagagaggaa	aggacaagag	aagagaaaat	ggtcacctta	300
taagtgtttg	ctgtaaaaaa	gtttttatca	ttaaaagatt	ttaaatcaca	aaaaaaaaa	359

<210> 95
 <211> 116
 <212> DNA
 <213> Mus musculus

gtaacatctg	cacctgggtc	caggetccaa	ggatgaattg	gtgggaatgg	gcctcccccc	60
accttttata	agtgcattct	ccattaaaca	tttgagcctt	gatcaaaaca	aaaaaa	116

<210> 96
 <211> 271
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(271)
 <223> n = A,T,C or G

tdccaccgct	cgaggctcac	attgggttcn	tgaagtatga	tcaanggnct	ggcttncctt	60
tnntacntga	cacttncctt	cctgnncgac	aggggccgtn	gctganannn	acctgaagat	120
gagatncana	ccctgganat	atggnggcgc	angccactgc	ngctgcagga	gatgngcact	180
gtcgttttat	gtttcctaga	tcagaaccan	gctacagccc	aggaaacacc	tgtttctgta	240
aataaagttt	tattagacag	aaaaaaaaaca	a			271

<210> 97
 <211> 165
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(165)
 <223> n = A,T,C or G

actgaggagg	ctaaagcaga	agggtcactg	ntacttgggg	agtgacttca	aggccagctt	60
caacaactta	gtgggaccct	gnctcaagta	agtaaaaaga	agactgggaat	tatagctcaa	120
ttatagtaga	acacttgccc	attatgtatg	agaaaataaa	agaaa		165

<210> 98
 <211> 307
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(307)
 <223> n = A,T,C or G

tggatgcagg	tccaaccaac	ggatcctntg	nggtccaaac	ctnntcaanc	caggagcccc	60
cgangncacc	gccctgtgag	cctctncttg	cggatgcccc	accagcccgt	cacaagctgt	120
cacccgagtc	tccgagaaat	tctctgggga	gacctnagnt	tcagctctgt	cacccacatc	180
tgctgccatt	gtggggggct	tcaccccaag	ccctagnagag	gcgcacatcagn	ccttgggactc	240

ccagacccac tgaaaaaagt ncntctttca ctcaggncctt tgncttggnc tctgggtatg 300
ggagcag 307

<210> 99
<211> 354
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(354)
<223> n = A,T,C or G

<400> 99
ctcgagccaa gaacctttcg cccgccccgc ccgcgcgacc cgtcccactc tgcgcccngn 60
ccngcccgcc aatggaaaag ctgcaaattg cgcgaccagc ctgccgcggg cgaccggcag 120
aaattcgggtg tgtgcaagcc cgggaaggct ccgtcagacc tggagggtggg gacagcgtgt 180
tgcaggcccc ggggagatgg cgcctacacg cngnncggcc tccatctctc ccagggttcg 240
ccaagccacg gcgcagccaa ttggctcgga gacatggcgg ggtgcctttt cgccttggtc 300
ctctgcggca ctctgctgcc gataatcgac gccttggaac tggaaaaaaa aaaa 354

<210> 100
<211> 370
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(370)
<223> n = A,T,C or G

<400> 100
gcttctgcta cttctgcctc attgttcggy acncacggng nagnnatgct ncnangactn 60
ttttatcaat ttggagntgg aancncaccn cgcncgncct ttnattagnt agnctgggtg 120
catcaaccat tactaccttg naggntttga anggattagc cccatancct ggggggtttt 180
actttttcca gacaagntct caagnatccc agggngggctt cctgactctc tcnagtanc 240
gaggataacc atatacttct gatcccacct gnacctnctg agtcctgttt taatggggng 300
ctgagactcg aacccatggc ttcncanatg ctanganac gcttttctgag ctgagctcca 360
ccccagcct 370

<210> 101
<211> 104
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(104)
<223> n = A,T,C or G

<400> 101
ccagcctggc ctacattgag aaacctcatt ttngnaaagn naaatacttc gtcaattaac 60
atcgcanntg gttcaataaa gacttttgga aagtgtcaaa aaaa 104

<210> 102
<211> 261
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(261)
<223> n = A,T,C or G

<400> 102
atgtctgact gcacctggga ggaccctatg tcgcaaattng gcttatttcc cctnccgnaga 60
cctantcaca ngtcacncag tnnngagcgt tcggtacaga tttccgggan ggaacacaca 120
ggtcatttgc gcccgaaact tgcncgtgtg cttgcgccat ttcctgcatc ctggcgcgcc 180
tcctccctcc ccacctncct tctccgagcg ncttaagccc aggcctccgg cctccgtctc 240
tgaggggtcct tggggggggcg g 261

<210> 103
<211> 330
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(330)
<223> n = A,T,C or G

<400> 103
cgaggagaag tacttgactc tttatannan tctgannnat cttggacggg actatncann 60
aggagcaggc tatttttaaaa ggcgnnnngna gancgcttnc cntancttca aggatgcgga 120
ggacccanana aanatcactn nacttatccc acgaggagan cttgcattga angagctaga 180
ngccntgccc ttncettanga aatacagagc nctgntgctt acgttactat tcagatncca 240
aagtctgacc aatcattgca ccagtcgagc tgacaaccag tgctggctgt ttgcctgtac 300
caactattaa aaaataattc agttttaaaaa 330

<210> 104
<211> 107
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(107)
<223> n = A,T,C or G

<400> 104
ctgacattat gggattgcag actaagaagg ncctactgac cccctcata catccagctc 60
gcccttttgc agtttcaaac catgaccgaa gtagtgaaaa aaaaaaa 107

<210> 105
<211> 129
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(129)
<223> n = A,T,C or G

<400> 105
aactgagatg tctgagagca aacaggtacg aagacagcgg gaccagtgcg tcaactcagta 60
aagcangcaa agaaacttcc tgtaagcgac aaantagaga agggtcctgg gactcttcac 120
tggtgatga 129

<210> 106
<211> 128
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(128)
<223> n = A,T,C or G

<400> 106
 tgtgttgaca gtgttttact cgaggatttg ngtnacnagaa acatcagngn gatcacactc 60
 acgaaataat ggnacnggag acattgatgg aaantttcat tcctcttatt catgattcag 120
 actgagaa 128

<210> 107
 <211> 120
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(120)
 <223> n = A,T,C or G

<400> 107
 acactgtgca cctttactac tggaccagag attattcgcc cggnaattgg ntncntncc 60
 ccttgcttca taactgagtg tngcaacagt gaanattgga gctttgatca gaaaaaaaaa 120

<210> 108
 <211> 255
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(255)
 <223> n = A,T,C or G

<400> 108
 tacagggaaat caggannccc tcccccttcc ttcatanctg agtggtgnaa ctannnggan 60
 tgcagctnan gatcanatnc tgaaganaaa ctctatgaat atagacaatg nggtaaagtt 120
 tttgcatgnc acagtcactt tcaaagncat gaaagaattc gngctggaga ggaatcctgn 180
 gaatgtaatc aatgtaataa tcacagtact cttcaaaatc ctgaaaaaaaa tcatactgaa 240
 gagagactat atgaa 255

<210> 109
 <211> 155
 <212> DNA
 <213> Mus musculus

<400> 109
 ttacgacagg aagaagcctg acataagcca gttacatgct catcaccctt gcgagaatgc 60
 tgtgcaggag ctgaagactt gctttcagtc ctcacacctac agtgactgcg gcaccggaag 120
 tcctggtatg ggttgaacaa accaccagcg ttaaa 155

<210> 110
 <211> 404
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(404)
 <223> n = A,T,C or G

<400> 110
 tgaggggaaag tcatggaggc ttcaggntct tcttcccagt ctcaagacag tgggtggagtc 60
 cacaggggaaa cggaagatca ctaccaagga gacatgagct ccacnagcat catgggaagg 120
 cccggnagcg atanangaga gacaggtntt nctcttcac ctcnatctcn gcattcttctt 180
 cctcctnttc ctcctnatct tcttcctnct cctnagnncg cntcnatgan gaccagnctt 240
 ncntaggtcc cagnnnncac naaaggangc cccncaggga caganttgcg tgggtgcatga 300
 ccatggngaa ctgnaagngc taaaggacga gcttnanctc tgcgnagggtg ctgctgcgga 360

aatggtncct actggcgagn caggactcct aaggagaggt tacg 404

<210> 111
<211> 108
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(108)
<223> n = A,T,C or G

<400> 111
gacatgatac ggatgnccgg attcanctgt taaagcagtt actggaggac tccacctnan 60
atgacgacgg gagcagctcc agctcctcgg gggacagaga gaagcgca 108

<210> 112
<211> 485
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(485)
<223> n = A,T,C or G

<400> 112
gactgaggta aacttggnac cgntcaanag gtagtggatc tnacagaccc canccgtnc 60
cgcttcactc tgcaagagct ganggaggng ctgcaggagc gaaacaagct caagtcgcan 120
ctgctgctgg tgcangagga actgnagtgc tacaggagtg gtctacttcc acccanagan 180
actncaggag gaagaagaga gaaggatgct gtgggttgcca tgggcaacgg cgagaaggag 240
gagaggacca ttatgaagaa gctgttctct ttccgggtcag ggaagcatac ctagactgaa 300
aaccatcacc aagatgggtga ccctcttgac ttgagaagac aattgccaat atgccttctg 360
gaaccacctt cctgtgtcag gaatgtgcct tggcttgctc ctgcacagag cagtcagagg 420
aagatgctcc ctcccatggc tcacctgctc tctggggaca gacctggaca gtcagtaagc 480
tttga 485

<210> 113
<211> 378
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(378)
<223> n = A,T,C or G

<400> 113
ttttgctgat cgccttgcaa gttttcatcg agtttggagt ttcccaccaa atgaaagtac 60
aggaaaagaa gtgacctgct tggcctggag accagacggc aaacttttgg cctttgctct 120
tgcgataacc aagaaaatta ttttgtgtga tgtagaaaag cctgaaagct tacactcctt 180
ctctgtggag gctccgtct cttgtatgca ttggacagaa gtgactgtgg aaagcagtgt 240
tttaacatcg ttttataatg ctgaggatga gtccaatctt ctcttgcta agctgcccta 300
gacccggacg tantcatcaa agtggagaaa cttgaccctg agttggactc gngaccacgc 360
ttgacagcat tgcgttag 378

<210> 114
<211> 136
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature

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<222> (1)...(136)
<223> n = A,T,C or G

<400> 114
tgtagaagag acactggcgg ccagcttgcg cttgggggga aacgattgaa catagtatng      60
gggtccatt tnactaacc aggctacatt gncganaact aacagcntga agntcctgac      120
ggccttcctg ccagtt                                     136

<210> 115
<211> 331
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(331)
<223> n = A,T,C or G

<400> 115
aactgaggtg gaaggacaca tacgctgacg ngctggcaat gcgatccatg gtgcgggttta      60
ncggaaggat ctagagacna gtcagctgac cctgagtagc caatgagaat tctccagttg      120
ctgctttaaa ttagagccgt ggccattaca ggagccgtca ctttgcttgc ctgccacgga      180
atccagggtt gtgcacctgg agatcccttg gggcccgatg acctgaagcc ttccccacgg      240
aaaaactgaa gcctgaacac tgtctacttt tcctccatct ttctttctct tagatggtga      300
aataaagaac tatcagacag caaaaaaaaa a                                     331

<210> 116
<211> 461
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(461)
<223> n = A,T,C or G

<400> 116
gctgccacce tctggaggnt cccgagtcct ttgtggntct gngngaaaag actctgtgta      60
cantgtgcta cnganccnga gngcggcatg tncgtgtacct cnttgatttg ccanaaacct      120
gcgcccagga nggtctggtg ctgnactggn tggactgacc acagtgcctg tcgtccagct      180
tgcccagctg gcatggaata taaggagtgt gtgtctcctt gccccagaac ctgccagagc      240
ctgtctatca atgaagngtg tcancagcaa tgtgtagacg gctgtanctc gccctgaggg      300
agantctctg gatgaacacc gatgtgtgca gagcttccga gtgtccttgc cttgcacgct      360
gggaaagcgg naccnctccn ggcacctncc tnttctcngg acttgtaacn ntttgtatcn      420
gcngancagc ctatggatnt ggagcaatgg aagaatgccc a                                     461

<210> 117
<211> 124
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(124)
<223> n = A,T,C or G

<400> 117
tgatcattag gaactttgat cagaatagan ggagcagagg tnctaaactc nattcnccag      60
aggcntgat gaatctntgg ntcagctnca gttnngtactc atctacataa aataaatgat      120
taaa                                             124

<210> 118
<211> 261

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<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(261)
<223> n = A,T,C or G

<400> 118
tttctactgg accactatat tattggggccg gganatctnn ntccccctn cn tngcttcn      60
tnactgattg cttcatnagt ganagtggag ctttgatcat tgnagctttg atcagnattt      120
nnacnanaga cntttgnccn atatccnaag gngngggcat actggagaga aaacttatga      180
atgtaatcaa tgtggtaaaag cttttgtaag acccagtcaa ctccaaacac ataaaagaac      240
acattctgga gagaaaccct a                                     261

<210> 119
<211> 391
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(391)
<223> n = A,T,C or G

<400> 119
cagggaggat agccgatata tncttantga cagcttcnnc nncngtntng anactgncac      60
agctggactc tggngaccac tnacnntatg ggnantgatt gcctttcnnc gncaacagcc      120
cttccnnttt ntntacagn ttgtggngnc tatgggccag atatacgng atgagctgta      180
cttcctgaca gagctacacg aaggactcca gcatggggag ataggncacc ccgtttattt      240
ctggttctat tttgntttcc tgaatgctgt atggtntggg ataccaagca tccttggtgct      300
tgatgccata aagcatctca ctagtgccca gagcgtgctg gacagcaaag ncatgaaaat      360
taanagcaag cataactaaa gagccggaga g                                     391

<210> 120
<211> 326
<212> DNA
<213> Mus musculus

<400> 120
ctaaagctcc agggaataga aattcctgaa gggacacgat tacaaagcag acagtcagtt      60
ccttggtgaa atcatggaaa tcaatgaaag actcgcagac gcccaaagtg aggccgccat      120
ggaagagata gaagccactg tcagagctaa acagaaagaa tttactgaca atataaacag      180
cgcttttgaa caaggtgact ttgaaaaagc caaggaaact ctgacaaaga tgagatactt      240
ttcgaacata gaagaaaaga tcaagctaag caagactcct ctcttggttg taacttaaag      300
ttttagaagt aaactttgta tttctt                                     326

<210> 121
<211> 452
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(452)
<223> n = A,T,C or G

<400> 121
gtggggtctt tcaacttgcc gggaggagca caagaagaag cacccgatg cttctgtcaa      60
cttctcagag ttttccaaga agtgctcaga gaggtggaag accatgtctg ctaaagaaaa      120
ggggaaatth gaagatatgg caaaggctga caaggctcgt tatgaaagag aaatgaaaac      180
ctacatcccc cccaaagggg agaccaaaaa gaagttcaag gaccccaatg cacccaagag      240
gcctccttcg gccttcttct tgttctgttc tgagtaccgc cccaaaatca aaggcgagca      300

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tcctggetta	tccattgggtg	atgttgcaaa	gaaactagga	gagatgtgga	acaacactgc	360
agcagatgac	aagcagccct	atgagaagaa	agctgccaag	ctgaaggaga	aagtatgaga	420
aaggatattg	ctgnctacag	agctaattga	aa			452

<210> 122
 <211> 415
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(415)
 <223> n = A,T,C or G

<400> 122						
cttcttgaga	gatcancctt	ggtgaanagt	tnctagcaca	caggtgacta	cgagaagggt	60
ntgnaccanc	tgtcaaagtc	cnttgctgtg	tgtggacagc	ctcagcagcc	tgntgcaagt	120
gtnacagnnn	actctttcgt	cnccagagtg	ngcnnatgct	tgtnaccaag	ctttccgacc	180
atnagtnaga	gaattggnag	ngctcaaagc	tnggntnnag	atgatgtgga	atgagccaga	240
taccaacaag	atanaatctc	agtanaataa	tctnaacnnt	taggcttgga	agctgggtcan	300
ctctggggga	ttaagggcaa	attatgctgt	catgaactgt	cccacactga	cgtnctgcca	360
aagcgaatat	gaactttggt	nagaccatt	gtctggncta	tttatttttc	cagta	415

<210> 123
 <211> 427
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(427)
 <223> n = A,T,C or G

<400> 123						
tccgtcctag	aactgacaag	ccagattctg	ggagccaacc	ctgattttgc	caccctctgg	60
aactgtcgca	gagaagtgtc	ccagcagcta	gaaaccaga	agtcccctga	ggagtgggt	120
gctcttgtga	aggcagaact	aggcttcctt	gagagctgtc	tgcgtgtgaa	ccctaagtcc	180
tatggcactt	ggcaccaccg	ctgctggctg	ctgagtcgcc	tgccctgagcc	caactgggcc	240
cgggagctgg	agctgtgcgc	tcgcttcctc	gaggccgatg	agcggaactt	tcattgctgg	300
gactatcggc	gattaaccaa	ngggnagnct	tttgttctca	ctgcananta	aaataatcaa	360
nactgacagc	ctgaccaccc	ngaacttctc	caactattct	tcctggcatt	atcgctcctg	420
cctattg						427

<210> 124
 <211> 260
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(260)
 <223> n = A,T,C or G

<400> 124						
cctggggagcg	ttctgggggc	attgggcaac	ccctttcact	cctttctgagg	aacanatgat	60
tgccgaggct	attcctnntc	tgaaagcntc	catcnanana	ggcagangac	tttgnaaga	120
ncatgaantg	agaggngaga	gcctgganca	ggatcccngg	catcntncta	acttattcaa	180
tcactntgtc	tttggaacca	ctngagaatc	tatttngcgt	ctgatggagg	gtgtngagnc	240
agnatcatgc	atctcttcca					260

<210> 125
 <211> 414
 <212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(414)

<223> n = A,T,C or G

<400> 125

ctaacgtaca	gaacagcttg	caagttaccg	atttgtacag	aagcgatgca	accttcatct	60
tgttgatata	tggaatatga	tcgaagcttt	ccgagacaat	ggccttaaca	cgctggacca	120
cagcacggag	atcaggcgctg	tnccgcctgg	agaccgtcat	ctcgtccatc	tactatcagt	180
tgaacaagcg	ccttccttct	actcaccaga	tcagcgtgga	gcagtccatc	agtctcctac	240
tcaatttcat	ggtcgccgcc	tacgacagtg	agggccgagg	cangttgacc	gtgttttcag	300
ntaaagctat	gttagcaacc	atgtgtggtg	gaaaaatgct	ggacaaattg	agatacattt	360
tctcccagat	gtcagattcc	aatggcttaa	tgatgttnng	aaagcttgac	cagt	414

<210> 126

<211> 146

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(146)

<223> n = A,T,C or G

<400> 126

gcttgctgac	aaagaagctg	ccgncctgac	catctancct	ctcagacntn	angctgnnga	60
ccatananct	anngacactn	aggntgntgg	agacctcacc	caggaagcct	ttgatcttat	120
aagtaaaggt	atgcgaaaaa	aaaaaa				146

<210> 127

<211> 419

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(419)

<223> n = A,T,C or G

<400> 127

gggcgtgtga	ccccgctgcc	tcccccttct	ccctgctgct	cgtgtccaga	ggatgagccc	60
agccttcagg	accatggacg	tggagccccg	caccaagggc	atcctgctgg	agccatttgt	120
ccaccagggt	gggggggact	catgcgttct	ccgatnnaat	gagacaaccc	tgtgcaaacc	180
cctggttccg	aggggagcatc	agttctacga	gaccctccca	gctgagatgc	gcagattcac	240
tccccagtac	aaagggaagt	gtggtncnct	ganaccnnc	ttcccgtcc	tgtgcgcca	300
nagntggtgc	ccgcctnacn	tntgnccnct	ctntntgagc	acgcattncc	ctgcagcang	360
caagnngtcg	ggcagcanag	actgagcana	tngaattgacc	gtggggcata	taaggccta	419

<210> 128

<211> 193

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(193)

<223> n = A,T,C or G

<400> 128

gacctcacca	cctccaacca	cagnccctcn	cacggagagg	tcttntgaca	gatgtcnatg	60
agaacaaccc	acnactnttc	gccggaagag	gaacatgtgc	nccagacctt	cntaannact	120

tcaatatgat	cggagcatnn	atangagggc	gnctatgatt	ctacagagaa	ctgaaaggaa	180
aacttttggat	cag					193

<210> 129
 <211> 474
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(474)
 <223> n = A,T,C or G

<400> 129						
actgagcttg	agatccgaaa	agcgggtccg	aacacaggat	catagagacg	acgggcgcag	60
agcgtatccc	ctggcggcac	cacggaggta	acgcggaggg	cggctagagc	gtcactcgcc	120
caggcggtt	cctcttcggc	agtcctcctt	cccaacatgg	cgcagtcgat	taacatcacg	180
gagctgaatc	tgccacaact	ggaaatgctc	aagaaccagc	tggaccagga	agtggagttt	240
ttgtccacgt	ccattgctca	gctcaagggt	gtccagacca	agtacgtgga	agccaaggac	300
tgtctgaacg	tgtctgaaca	gagcaacgag	ggaaaagaat	tactggtccc	actgacgagt	360
tctatgtacg	tncccggtta	agctacacga	tgtggagcat	gtgcttattg	atgnnggaac	420
cggntactac	gtggagaaga	cagctgagga	cgccaaggac	ttcttcaaaa	ggaa	474

<210> 130
 <211> 152
 <212> DNA
 <213> Mus musculus

<400> 130						
ctttatcttt	ggtggctcggc	atctgatgaa	caagcgagcc	aagtttgaac	ttcggaagcc	60
gctcgtgctc	tggctcgtga	ctcttgccgt	cttcagataa	ctgtttggtc	acgttgctta	120
gtaaaataaaa	gtccacacta	tgaaaaaaaa	aa			152

<210> 131
 <211> 769
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(769)
 <223> n = A,T,C or G

<400> 131						
gagcaagagc	agctctacct	gcgggtctggt	gtgggtgacct	ccgcaacctt	tgagcagcca	60
gggcggcagg	tcaagctgtg	ggtgaagatg	gtgaccccg	taatcaagaa	cttcttctga	120
gaacaggaat	ggccttgatg	aagatgacgg	gcctgactgg	ggtcagatcc	ttcaaccggg	180
cttcagcaat	gactccggtc	tgggtgtccc	agcgagctcc	tgtggggaca	atggagctga	240
gggtctgggt	gccctagggg	aggcagaacc	cactgttttg	atgctgaccg	tgaaaaaggg	300
aggcacggtg	gggagagagg	cctggcctcc	aacctcccca	ctcttttcag	agacaggcca	360
gtgactggga	gccatgaagc	gttcangcca	ggtgccangg	tctgagagtg	ccaaacatgg	420
aggaatgtga	accaaggact	tcgangtgac	tcttgacattg	cccgtaatgg	gctctgaagc	480
tgnatcttct	taaaacttta	atcttaagcc	nttttcaatg	ntcaantggg	cannagaaaa	540
acttggancc	gcaagnntca	anaatnccca	agcaaatggg	tnccctttcc	ttgaaacccc	600
cttccttggg	ggnaaagggg	cttaacttct	tcttggggga	cccttttangg	gggaaataaa	660
ggttantttt	tttttaggaat	gccccenttt	tttttaaacc	cctttttttt	gggccccctt	720
aaacccccnn	aaanntgggn	ttgggtggggc	ccccctttaa	accctttaa		769

<210> 132
 <211> 458
 <212> DNA
 <213> Mus musculus

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<220>
<221> misc_feature
<222> (1)...(458)
<223> n = A,T,C or G

<400> 132
actgaggtga atgaggactc tggggnnact catggagaag atgcggttgt gatcctggag      60
aagacaccat ttccaggtaga acacgtggcc gcagctccta acggggagcc ctgagctcaa      120
gttgacagttc tccaatgata tctacagcac ctataacctg tttcctccaa ggcattctgag      180
tgatataaaa acaactgtgg tgtaccctgc cacagagaaa cacctgcaaa aatacatgcg      240
tgaggacctc cgcctgatcc gagagactgg agatgactac aggaccatca ccttacccta      300
cctggaatcc cagagcctta gcatccagtg ggtgtataac attcttgaca agaaggctga      360
agntgaccgg attgttcttg agaaccana ccttcttgat ggctttgctc tcntccaga      420
cencangngg aaccagcanc agcttgatga cctgtatt                                458

<210> 133
<211> 114
<212> DNA
<213> Mus musculus

<400> 133
gtactgaggc aagttacatt gcctcaacac agtacacccg acgggtacgt ggcgaaagca      60
gcggagggtc aaagaaggat actgtgcccc aagaggaggt cccaaaaaaa aaaa          114

<210> 134
<211> 204
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(204)
<223> n = A,T,C or G

<400> 134
gactgagctc cccctcccca gaggttaagca gccctccagc gccaaagcagn ttagcatgtg      60
tgactctgga caagacaacc ttcccagggt tctgaccgta naggacgcaa naagacgacc      120
atgtctgagg gcaagatctg aggactaggg atggngctca gacctgccac acccaaggtc      180
tcttcagcac agcagaaagg aaga                                204

<210> 135
<211> 377
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(377)
<223> n = A,T,C or G

<400> 135
ttccctgggtg gactccagtc aagtgtcgac atttctgata tccattcttc ttatagtcta      60
tggtagtttc aggtctctta atatggactt tgaaaaccaa gataaggaga angacagcaa      120
cagttcttct ggctctttca atggcaacag caccaataac agcatccaga ccattgattc      180
caccgaagca ctgttctcc cgattggagc gnetgtctct ctctctcnca tgttcttctt      240
ctttgattca gttcaagtcg ttttcacaat atgtacagca gganntgnan aacnnnttc      300
cncnnntggg gatatgcctn agtgantgnn atcaccangg ctgctgctca ggctggnaac      360
aaactaagat ttcccgg                                377

<210> 136
<211> 344
<212> DNA
<213> Mus musculus

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<220>
<221> misc_feature
<222> (1)...(344)
<223> n = A,T,C or G

<400> 136
tccgaacaaa aagtggggtc tgtgngcccc ggaagnggac ataccgattg actgngggga      60
aaggaaacat ggantcmeta actgangggc gccagacat gaaaacagac ctgtttctcca      120
gctcgtgccc aggaggaatc atgctgaaan agacgggcca gggctaccag cgctttctcc      180
tctacaatcg ggtcaccaca cctcccaaan aagtgtgtgg aggaattcca gtctctgacc      240
tcttgcttgg acttcaaagc cttcttagtg actcccagga ntcaagaggg ctgcccgtcg      300
tccagcaagt gaccagtgc ttccccgggt ctaaaaaaa aaaa      344

<210> 137
<211> 121
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(121)
<223> n = A,T,C or G

<400> 137
aacataagca ctcacannat gaanccctgc caaaaaatgg aaggaaacct agaaaaggag      60
natganccaa agcctnagna nnagccaaca gccngagnaa aagcctctag gaggggcagg      120
a      121

<210> 138
<211> 320
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(320)
<223> n = A,T,C or G

<400> 138
ccctgacatc ccttgagcgc agacccttct agccgattac atcaatgggt tcccgggaga      60
caccttcttc ttgctctaag acccttgaaa ccttgacat ggagacttcc gacagctcta      120
gccctgatgc tgacagtcct ctggaagagc aatggctgaa atcctcccca gccctgaagg      180
aggacagtgt ggatgtggta ctggaagact gcaagagacc tctgtccccc tctcgcctn      240
cgacaggcag agagatgatc aggnacaaac tcnaagcgaa ccgncngagc attgaanaca      300
tntgtctctg ctgaggaact      320

<210> 139
<211> 418
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(418)
<223> n = A,T,C or G

<400> 139
tgccctgcat cacctgggtg nggcagtgc aagcccggtc agtggccctg gcaggtcagc      60
atcacctaca atggctacca tgtttgtggc gggctgctcg tgtcaaataa atgggtgggtg      120
tctgtgtctc actgctncc cagagaacac agcagggaag cgtatgaggt gaagntggng      180
ncccaccagc tanactccta cagcaatgac actgtggtec acacagtgnc tnagatcatc      240
accactcaa gctaccgaga ngagggctcc caggggggaca tcncgctcat ncgcctcanc      300
agtccgtgca ccttntcccc ntacatgang acaccatctg cctncctgaa gncaatgcct      360

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gctttttcca acggncttc actgtnctgn cacggaatgg gntcatgtgg ctccttga 418

<210> 140
 <211> 179
 <212> DNA
 <213> Mus musculus
 <220>
 <221> misc_feature
 <222> (1)..(179)
 <223> n = A,T,C or G

<400> 140
 agaaggtggc cactttnnac tatatgcatt tgaagatgtg ctccctccac ngaccaactc 60
 agccacctgc cacttgaggg gtccacgggg gcaatgnngg gaggaagcan tggaggggct 120
 cccctaaac gtgggagtc aggctctgaa caataaatgg cctctcatgc tggcatgaa 179

<210> 141
 <211> 357
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)..(357)
 <223> n = A,T,C or G

<400> 141
 gaactgagct ggattaanca gctctccagt atgaacttca tagatggcag catcataatg 60
 tgacgtcacg gcttgaacat gactgacagc atcttcagct gctgaggtec ctcacagct 120
 catggtgact ccagtttgaa ctctcaagct gcctgcatcc agagcctcaa acccactgtc 180
 ctggtctcag gagcccatct acaagctcag aatgagggac cacatcctga ctctgcatca 240
 ctctgccaa tgagcattgc ccacctaggg ccagaagtaa cataaaggaa taggcagtga 300
 atgaanaata gagagctagt gtgnggtac acacctatga ttccagcact tgggagg 357

<210> 142
 <211> 224
 <212> DNA
 <213> Mus musculus

<400> 142
 gactgagaga tgtggtatgg tgtgttcctg tgggcactga tgtcctctgt gttctttcat 60
 gtccctgccg gactgctggc cctcttcacc ctcagacacc acaaatatgg taggttcatt 120
 tctgtaagca tcctgttgat gggcatcgtg ggaccaatta ctgctggaat cttgacaagt 180
 atgttagaca ttaaaatacc ggtcaaaaac gtgaaaaaaa aaaa 224

<210> 143
 <211> 414
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)..(414)
 <223> n = A,T,C or G

<400> 143
 gactgagccg ccctgcaggc tctgaagcgc aagaagaggt atgagaagca gctggcacia 60
 attgatggca ccctgtcaac catcgagttc cagcgggagg ccctagagaa cgccaacacc 120
 aacacggagg tgetcaagaa catgggctat gccgccaagg ccctgaaggc tgcccacgac 180
 aacatggaca ttgataaggt ggatgagtta atgcaggaca ttgctgacca gcaagaactt 240
 gcagaggaga tttccacagc tatctccaaa cctgtgggct ttggagaaga gttcgacgag 300
 gatgagctca tggcagagtn ttgagncttg ancaanaaga gttncgcaag aatttgttgg 360

agatcagtgg gcccgaaaca gtccctctac caaatgtccc ctccgtaccc tacc 414

<210> 144
<211> 248
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(248)
<223> n = A,T,C or G

<400> 144
ggactcccct aggattccga gcacctttcg ctgtggactc cagccccacc cgaggntgga 60
tgtggagctg aggaaactga cccaccgctt gctttcctgg gagccccctt ctctcctaata 120
tcatgagcca cgcaggatgc tggtcgcctt gcgctttcag aacgcctgct catagctgctg 180
tacaaaggcc aancannttn ntgtggnnnn gngnnatcaa caaggggtgcc aaggcagccc 240
gttaccaa 248

<210> 145
<211> 492
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(492)
<223> n = A,T,C or G

<400> 145
gacttcagga accatgccga agccacacag tgaagcaggg actgccttca ttcagaccca 60
gcagctccat gcagccatgg ctgacacctt cctggaacac atgtgccgcc tggacattga 120
ctctgcccc atcacggccc gcaacactgg catcatttgt accattgggc ctgcttccccg 180
atctgtggag atgtgaagg agatgattaa gtctggaatg aatgtggctc ggctgaattt 240
ctctcatgga acccatgagt accatgcaga gaccatcaag aatgtccgtg aagccacaga 300
aagcttttga tctgatccca ttctctaccg tcctgtttgc gtggctctgg atacaaaggg 360
acctganatc cggactggac tcatcaaggc cagcggcacc gctgaggtgg agctgaanaa 420
gggagccact ctgaanatca ccctggacaa ncgcttacat ggagaaagtg tgacgaagac 480
atccctgggg tt 492

<210> 146
<211> 465
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(465)
<223> n = A,T,C or G

<400> 146
actgaggaat ctcatgcact agggnaagga acctgaaaac ccagcagaca tgattgaaga 60
aggagagtgt atcctatctg tgaacatctt atatctgtt atatttaata agcacaaga 120
acacaaacca taccagacca tgttggtact gggcagtcag aagctcacag aactgagaga 180
ttcaatttgc tgtgtcagtg acctccagat cgggtggagaa ttcagcaacg cgcagacca 240
agcccctgag cacatcagca aagacctcta caagtgcgct tttttctatt ttgaaggaac 300
attttacaat gacagaagat acccagaatg cagagacttg agcagaacta ttatagagtg 360
gtcagagtcc catgatcgag gatatggaaa atttcagact gctagaatgg aagatttcac 420
atttaatgac ttgcatatta aacttggtt tccttactta tactg 465

<210> 147
<211> 111
<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(111)

<223> n = A,T,C or G

<400> 147

gactgaggaa aatcttctgg ntgtnatntt atataaccaa acatgtcatg gnccttcaca	60
gcatacnaat agttttgacg ttttaaatan aagtatccag cacagacaaa a	111

<210> 148

<211> 425

<212> DNA

<213> Mus musculus

<400> 148

gggggtctttc aagagcagcc ggtatcagtt ccgcaatctg gcagaatgcc tacagaaaat	60
tcgagacatg attgccgagg ccagccaggt acccaaagag ccatccaagg aagatgctcg	120
gcttcagaga ctcaggattg aaaagatgaa tcgggaaaagg ctacgacaga aaagactaaa	180
ctctgcccta aagaccagca ggaggatgac tatggactga agtcggccct cctgctggc	240
atagacctga gtgccagtgc agctcagcag agcactgaca cacacaggag acttttctcg	300
attaaccgcc ctgcccgcagc agcgttcctt tggagggagg ctgcagatca tccagggctg	360
ccccttcctg tatccacctc atgaatcact ggctgcaata aacatcgaag cacaggaaaa	420
aaaaa	425

<210> 149

<211> 243

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(243)

<223> n = A,T,C or G

<400> 149

gatgaccgag aagcgcttga aaaggagaaa gcaatacatt gaacgcntga gaaacctgac	60
tgaggaagaa aggcgggcag aacttcgggc aaatggcaaa gtcattacca acaaagctgt	120
ttaaaggcaaa tacaagtttc tacagaagta ttatcaccga ggtgccttct tcatggatga	180
ggatgaagaa gtctacanga gagactttag tgcacctact cttgaggaat ttgacaggat	240
ggc	243

<210> 150

<211> 128

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(128)

<223> n = A,T,C or G

<400> 150

cctgagcggg gcatctggng gccgctgtct atgctctntt ttccnctgga nagaatattt	60
aaggaangct ccttcattaa gtattaagna tatggaaata aagaattact cagtcttaaa	120
aaaaaaaa	128

<210> 151

<211> 528

<212> DNA

<213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(528)
 <223> n = A,T,C or G

<400> 151
 cactgaggag tctagagcag gaggatcttg agttnaagng naaggntggg atangtagtg 60
 tgtggagaac agctggnggc aacgagatgg ctgcttctgt cccatggggc tgctgtgctg 120
 ngcttgccgc tgccgccgcc gntgtataca cgcagaaaca cagtccacag gaggcacccc 180
 acgtgcagta tgagcgtctg ggcgcagatg tgacgctgcc gtgtgggaca gcgagctggg 240
 acgcagctgt gacatggagg gtaaacggga cagatctggc ccctgacctg ctcaacggct 300
 ctgagctgat actgcgaanc ttaaaactgg gccacagtgg cctatacgcc tgttttcacc 360
 gngnanttct tnggacttgg ggccncnaaa gcctttttaa atntgggggt tgccgccgcg 420
 gggagcctgg tgcttcagct tgccgcttca acaacttacc ccaagggtt ctactgcagc 480
 ttggaacctg cccaaccccc acctacatnc ccaatacctt caaatgtg 528

<210> 152
 <211> 343
 <212> DNA
 <213> Mus musculus

<400> 152
 tgagagatta ctggcttcga gtcccaagcc tctggcatta gcttcctgag agctggactt 60
 acagagtggc ttctttatgg taaaagggtc tatcccacag cccacattgt caggaatggc 120
 tccctctaaa gtgaaagtgg ataaactcaa gagaaaggat tggatcatac acggtttttt 180
 ttctcctttg agattataat gaacatgggtc acaccacaag taaagtccga agtaggacag 240
 aaaacgctct gaaggcttgt ttgatcacc gttatcgta aaaatagctg acccctaaca 300
 atatgtaccc aaatataaaa tgtaataaaa aaataccaac aca 343

<210> 153
 <211> 481
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(481)
 <223> n = A,T,C or G

<400> 153
 attcatgggc attgcagtct aagaaggtcc tactgacccc cctcatacat ccagctcgcc 60
 cttttcgagt ttcaaaccat gaccgaagta gccggcgtgg ggtgatggcc agcagcctgc 120
 aggaacttat cagcaagact ctggatgtct tagtcatcac aactggcctg gttacgctgg 180
 tgctggagga ggacggnacc gtggnggaca cagaggagt ctttcagacc ttaagggaca 240
 acacgcattt catgatcttg gaaaaggac agaaatggac accgggtagt aagtatgtcc 300
 cagnctgcaa gcaaccaaag aaatcgggaa tagccagagt caccttcgac ctatacaggc 360
 tgaaccccaa ggacttcctc ggctgtctca atgtcaaagc cacgatgtac gagatgtact 420
 cgggtgtcta cgacatccga tgcacaagct taaggccgng ttaaggaatc tgcaactaaa 480
 g 481

<210> 154
 <211> 101
 <212> DNA
 <213> Mus musculus

<400> 154
 actgagggaa gtagcttcta acaatgaact atggcaacaa ttctgcttca aaacttacta 60
 atacaattgg atgaacagtt ggggcgtgtt tccaaagaaa a 101

<210> 155
 <211> 438
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(438)
 <223> n = A,T,C or G

<400> 155
 actgcgaaat tatcactttc tggccatggt ggatttgaca gtctgcccga ccagctggtc 60
 aacaaatcca cttctcaagg attctgtttc aacatcctgt gcgtgggtga gacaggatt 120
 ggcaaatcca cattgatgga cactttattc aacaccaaatt ttgaaagtga cccagctact 180
 cacaacgagc caggcggtccg gttaaaagcc agaagctatg aactccagga aagcaacgta 240
 cggctgaagc taacaatcgt tgacacagtg ggatttggag accagattaa taaagatgac 300
 agctataagc ctataatgna atanatngac ncccantnng atgcctantg caagaagaat 360
 tgaataattaa acgttctctc ttcaactatc atgacacaag gattcncgcc tgcctttact 420
 ttatcgcccc cacgggac 438

<210> 156
 <211> 451
 <212> DNA
 <213> Mus musculus

<400> 156
 actgagtatg acagtcattg ccctctccgg ggcctcaagg acgactttca cagtgcacaca 60
 gtactctcca tcttaaatga gcagcgcatt cggggcatct tatgtgatgt caccatcatc 120
 gtggaagaca ccaagtttaa agcccacagc aatgtccttg ccgcctcaag tctttatttc 180
 aaaaacatct tttggagcca tacgatctgc atttccagtc acgtcttgga gctggatgat 240
 ctgaaagccg aagtgtttac agaaatactt aattatatct acagctctac cgttgtggtc 300
 aaaagacagg aaaccgtcac tgatcttgca gctgcaggga aaaagctggg aatatcattc 360
 ttagaagacc ttagtgaccg caacttctca aattccccag gtccttacgt agtctgcatt 420
 actgaaaagg gagtgggttaa agaagaaaaa a 451

<210> 157
 <211> 475
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(475)
 <223> n = A,T,C or G

<400> 157
 aactgaggct tttgtggcta caggaaccaa tctgtctctc cagttttttc cggccagctg 60
 gcagggagaa cagcgacaaa cacctagccg ggaatatgtc gacttagaga gagaagcagg 120
 caaggtatac ttgaaggctc ccatgattct gaatggagtg tgtgttatat ggaagggctt 180
 ggattgatct ccacagattg gatggtatgg gttgcctgga gtttgatgag gagcgagccc 240
 agaatctgat gtcattgatg atagccaanc tggggaaatc atggtgaact tcacaggctg 300
 gttgaacaan ngtnaagtga tcagccctag atttaatgtg caactcaaag acccagaaaa 360
 tagcgganac atntgctctc acctgncact ggcttccagn gnactgacnn cttcagctgg 420
 agncatggac catgaagaac atgaggaana cacacncgaa gggaaaattc ttgtt 475

<210> 158
 <211> 438
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(438)
 <223> n = A,T,C or G

<400> 158
 agactgagga ggaatctttg agtatgcgga tggtoccaac gccaggtca tgaacgctga 60
 agagcacgcc ttctgatctt ctgccaacat catcaacaga aacaggactc tgctgcccac 120

cacgaccctg	acttacgaca	ttcagaggat	tcacttccat	gacagttttg	aggccaccaa	180
gaagggtaag	aacactgaaa	acatgcgtgc	aacacatcat	attaaccgta	gtcaccttgc	240
tacgggtctt	attgcatctt	tcgttggcat	cctactcgag	tagcaatagg	tagcatacat	300
ataaagcaga	gactgtatta	gccccagagc	acaccatctg	cctgccgtaa	aaagacttta	360
taagcacagc	gtgctgctca	gtgcccgcga	catcttgacc	ccagaaccta	cagaaaaanc	420
cttgaagttg	acaccggg					438

<210> 159
 <211> 437
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(437)
 <223> n = A,T,C or G

<400> 159	
tgaggatacc	agcatgccag
cgatccagga	tccagcagaa
cagtcagagc	cagcagaant
aagaccgacg	aagaagatga
agtgtcctct	cactgtctgt
aagggtctgt	ttccagcaaa
tcatgtggca	caactgantt
tgcttcaaaa	aaaccca
	60
	120
	180
	240
	300
	360
	420
	437

<210> 160
 <211> 224
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(224)
 <223> n = A,T,C or G

<400> 160	
accagtgaca	attactacta
gcatttcttc	tgccaccacg
ccttgctcact	accagatctg
ggctggntca	tggacacctg
	60
	120
	180
	224

<210> 161
 <211> 176
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(176)
 <223> n = A,T,C or G

<400> 161	
actgaggaaa	atatatgcaa
ggnaatnntg	aatattataa
cttatgtatc	ctagtctaac
	60
	120
	176

<210> 162
 <211> 357
 <212> DNA
 <213> Mus musculus

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<220>
<221> misc_feature
<222> (1)...(357)
<223> n = A,T,C or G

<400> 162
gggctctttc tacatagctc tggtgtgtoct caangtgngt agaccaggct gcttcactga      60
gngctaggna ttaaaggaag gcaccaccac cccggntctg ggccaatgan ancggcacna      120
aaagacccgn tgntgctogt ctaccattta ctgattcatc tccactccag aagnctanag      180
anacagaaga cnatcngtnt cactncaatg gncanataac tgagtactga ctggctcagg      240
ngatcctaaa gncaactcac caatgtagca naagcccnag tgnaccgac tgaaggagaa      300
aacacaganc tacncattgc attnacctcc cctattattc attacatgcc accccac      357

<210> 163
<211> 529
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(529)
<223> n = A,T,C or G

<400> 163
gactgaggaa taatgtctca gccaatcagg atgaagaact gggtcatgag acattcctga      60
tgcaaatcga ccaggagaca aagaagtgtg ctttctattc cagcactggg ggctactgga      120
ccttgggtcac ccattgggggc attcaggcca cagccacaca agtctctgcc aacaccatgt      180
ttgaaataga atggcatggc cggcggtggg cacttaaagc cagcaacggg cgttttgtgt      240
gcatgaagaa aaacgggcag ctggccgcca tcagcgactt tgtgggcgag gacgagctat      300
ttacctcaa gctcatcaat cgacctctcc tggtgctgcg tggcctggat ggctttgtgt      360
gccaccgccc gggctccaac cagctggaca ccaaccgttc cacttacgac gtcttccact      420
tgagcttcag ggatggcgcc tatcagatta gagggcngng aggtgggttc tggtagacag      480
gcagccatgg aagcgtgtgc agcgacgggt acttggcgga agatttcct      529

<210> 164
<211> 552
<212> DNA
<213> Mus musculus

<400> 164
atgagcggga ccgagtgcga aagaaaacat tcaccaagtg ggtcaacaaa cacttgatga      60
aggtccgcaa gcacatcaat gatctctatg aagaccttcg ggatggacac aacctgatct      120
ccctgttaga ggtcctctca ggcatacaac tgcccagaga gaagggcagg atgcgtttcc      180
acaggctgca gaatgtgcag atcgccctgg acttcctaaa gcagcggcag gtgaagctag      240
tgaatatccg caatgatgac atcacagatg gcaatcccaa gctaacgctg ggcctgatct      300
ggaccattat cttgcacttc cagatctctg acatctacat tagtggggaa tcagggggac      360
ccaccaggat aaaccaagtg agtgtttatc cactcacagc ctttcgtgac cctacatttc      420
catgcacagg tcagaagctg caccaatgag aagtcttcag gcgatgtaga aatgactgtg      480
gattctaata cacaccgaaa ttctgactga gaatttaaat tgcagaataa agttttaaaa      540
cctaaaaaaaa at      552

<210> 165
<211> 114
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(114)
<223> n = A,T,C or G

<400> 165
catggcatcc aaggatgaat nggccgggaa tggactttcc cccctttttt ccccccctctt      60

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ttctaaagcg ngctctgcat taaaaatttg aaccttgaga gaaaaaaaca caaa

114

<210> 166
<211> 239
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(239)
<223> n = A,T,C or G

<400> 166	tccatatatg	aaatgagnaa	caatgaatgn	ccagtggagg	ttgcttgcca	gacaggagct	60
	gagcccacct	gcagccaagc	ctccagcact	aaggncacca	ncagtggaag	nactcanacg	120
	gatganagcc	atnaaggcnt	anctgantcc	agnanggaca	aatnccagnc	tnctgcccac	180
	catgccaaag	ctgnngatan	ccctnggcc	ccaccaagtc	ccctactgag	attaccgctc	239

<210> 167
<211> 461
<212> DNA
<213> Mus musculus

<400> 167	gataaaactc	catccgcact	cattctcaca	ccgacaagag	aactggccat	tcagatagag	60
	aggcaggcca	aggaactgat	gagtgggtctg	cctcgcatga	agacagtgc	tctcgtaggg	120
	ggcttacctc	tgccccaca	gctctatcgc	ttacggcagc	atgttaaggt	tatcatagca	180
	acccctggac	gacttctgga	tataattaaa	cagagctccg	tatcactcag	tggcataaaa	240
	attgtcgtag	tagacgaagc	tgacaccatg	ttgaagatgg	gcttttcagca	gcaagtgcct	300
	gacgttttgg	aacacactcc	tggtgactgt	cagaccatct	tggtttctgc	caccattcca	360
	gatagcatag	aacagctcac	agaccagctt	ctgcataatc	ctgtgaggat	catcactggg	420
	gacaagaacc	tgcttgcgcc	agtgtgcggg	aaatcattct	a		461

<210> 168
<211> 457
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(457)
<223> n = A,T,C or G

<400> 168	ttaggcccg	aggcggaacc	ggaagaccgc	ggtactgggtg	ccacgtccgt	tgtgtgtgtg	60
	cgaattccct	gagtgggacc	ctggaggggc	cgatggcaga	ttggactcga	gctcagagct	120
	ctgggtgtgt	ggaggacatt	ctggacagag	agaacaagcg	gatggctgac	agcctggcct	180
	ccaaggtgac	caggcttaaa	tcgctggctt	tggacatcga	caggggacaca	gaggaccaga	240
	accgttactt	agacggcatg	gactcagatt	tcacaagtgt	gactggccta	ctcacgggga	300
	gtgtgaagcg	cttctccacg	atggcacggg	ctgggcgaga	caaccggaag	cttctgtgtg	360
	gtatggctgt	ggtcttaatc	gtggccttct	tcacctcttc	ctacctcttg	ncgaggacaa	420
	ggacgtgagc	cagngggagc	caagggcagc	caggcta			457

<210> 169
<211> 313
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(313)
<223> n = A,T,C or G

<400> 169
 ggaaagaaga aatatgaata cggctccatc aagacccagc cccacacgaa gctcgcgtgt 60
 cattgggagc cttcagagca ggaggagggc cccagggtcg agctgggtgtg tacctgccat 120
 gttgctctgc agcaggcagc agagatttga ctcttcgttg caaattgctg ccgggtccaga 180
 tgctaagcca ggtttgcggg aagagctgct tgagagctgc tgctgtgcct gtgctgcana 240
 ccccgcgtgc tcgcatgttt gggttacttg tttgaaggga aataaaaagg gcaaaacact 300
 ccaaaaaaaaa aaa 313

<210> 170
 <211> 130
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(130)
 <223> n = A,T,C or G

<400> 170
 gtgtccacca cccacagccc agcggcctgc agcgatcntg acctnatctg cccactgan 60
 ccacngaata angnanccnn ccctactctc ttgaatacca tcaataaagt tcgctgcacc 120
 caaagaaaaa 130

<210> 171
 <211> 215
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(215)
 <223> n = A,T,C or G

<400> 171
 gcctccaggt atgaaatcca aacagatgtg catagacnng atccctgcga ctgtcagagg 60
 cagaagtcca catggataac cctgtctcag gaggaagg agacgtcaag gacagangga 120
 gtggaaagcg aagcttcaact tcctttctag agaattctgct ncaancacca atatatatgt 180
 aaatgtgtca ntinatngaac tttcctgaca aatta 215

<210> 172
 <211> 121
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(121)
 <223> n = A,T,C or G

<400> 172
 tgccgttctt ttgttcttct ccgtgaaaaa ctgtgtccgn agtgacaaag agacagtgtc 60
 cgtttgttca tntgtgacat cagagnagcg tactgtagca catcncgaga gacagatgag 120
 a 121

<210> 173
 <211> 207
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(207)
 <223> n = A,T,C or G

<400> 173
ggaactctca aaggtcngac acgcgaagna tggcatgctt ncatataaan gncatctnna 60
nnnaagttca ccctntcggg nnntgcaggg tgactcaggg ggccctggctg ctgcttgtct 120
ggctttgttg aagagggatt ggggaagcag gggtgtggnt cctattttct cccaccntn 180
caagccncg gcaaggtctt tgtcgaa 207

<210> 174
<211> 391
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(391)
<223> n = A,T,C or G

<400> 174
gactgagtcc agcccaaaga gtaaacnaga naagcttggg gaagcccctc gccctgggng 60
ggtgctcttt gactttgnct nnganccgat gaccaccan aaccactgc tggagacaaa 120
cagccgctcc ccggggctga aggggtactgt tggaggtcat cgaacaagca agattatgag 180
gtttgttgat aagatcacca aatcaaaaata ttccaaaaa gcaacagaga cagaattcat 240
taaaaagaag atcgaagaag tctctaatac accagctgcc tgaggaaaag ctttggagga 300
gtcaaaaggc aaagggaagc cttctagttg tacagctttg ctctgaatgt gctcatttgn 360
ttgtccgtga gatgccagga cttggaaggt g 391

<210> 175
<211> 260
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(260)
<223> n = A,T,C or G

<400> 175
ctcctgccaa tgtggctnac tgcattgcatt angngctttg gatgacctga nctctggncn 60
acctgnancc acatggtagt naggctgctg acttgagag atggtgacaa gattgagtct 120
gtctggatga tagcatcctg tgccacctac tgatgactgg ttgggtgtgg aagccacatg 180
tgccgttgca gagtgggtact gactactgct ggccaccacg cataagattg gacaaacaac 240
caatgtgtac atatgcagta 260

<210> 176
<211> 246
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(246)
<223> n = A,T,C or G

<400> 176
gtggggagcg tggattcttc tacacaccca tgtcccgccg cgaagtggag gaccacaaag 60
ttctgaagat gaactggatg tgcttttaca tggaacccca gaccaaagc gaaaactcat 120
ccgggaatgt cttactggag aaagtgaatc atcaagtga gatgaatttg aaaaagaaat 180
ggnggctgaa ctaaactcca ccatgaagac aatggaggac cagttatcct cactgggaac 240
aggca 246

<210> 177
<211> 535
<212> DNA
<213> Mus musculus

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<220>
<221> misc_feature
<222> (1)...(535)
<223> n = A,T,C or G

<400> 177
cacctccaga aattgagggga gaantanngc gagacttcat ggntgcgctg gaggcagagc      60
cctatgatga catcgtggga gaaactgtgg agaaaactga gtttattcct ctccctggatg      120
gagatgacga aaaccgggaa ctcagagncc aaaaagaaac cctgcttaga cactatncag      180
gnngaangtt ccnatcttct agaccaacgc tcctanccat gggatgatcan ggaatggagg      240
ggaataacac tgcnggggtct ccaactgact tccttgaana gagantggac tatccggatt      300
atcagancag ncagaactgg ccagaagatg caagcttttg tttccagcct cagcaagtgt      360
tagatactga ccaggtgag ccctttaacg agcacctgta tgatggtttg gcagatctgc      420
tctttgnctc cagtggaccc acgaaccgct tctgcatttt acagangcga gacaattctt      480
cngaaagacn gntncngnnn aattctacat aagaaaatct gcttttgagg gctgg      535

<210> 178
<211> 597
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(597)
<223> n = A,T,C or G

<400> 178
gacatcaatg cttacaatgg tgaaacaccc acggaaaagt tgccatttcc catcattgat      60
gataaggggca gggacettgc catccttttg ggcattgttg atccagtcga gaaggacgat      120
aacaacatgc ctgtgacggc ccgtgtggtg ttcatttttg gccctgacaa gaaactgaag      180
ctgtctatcc tctaccctgc caccacgggc aggaactttg atgagattct cagagtgggt      240
gactctctcc agctgacagg cacaaagccg gttgccaccc cagttgactg gaagaaggga      300
gagagcgtga tggtagttcc caccctctcc gaagaggaag ccaaacaatg tttccctaaa      360
ggagtcttca ccaaagagct cccgtctggc aaaaaatacc tccgttatac accccagcct      420
taagtctttg cggaaattgg ggctgcatct gcacatccag tactggggcc tgaggatgtc      480
agctggcagc ccgtgggtcc ttgcancang tccgtagaaa gatcgtggca tgatcacaag      540
ccggcctgta gatcgtctgc tatactactg ggcattaaat ggaaatggcc ccaaaaaa      597

<210> 179
<211> 203
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(203)
<223> n = A,T,C or G

<400> 179
cgggccaccg gcggtctgtg aagaagcctc accgcctacc gtaccggcac cgngnttgct      60
gngcgagatn cggccgctac cagaagtcga ccgagctgct gatccgcaag ctgccgttcc      120
ancgcctggt gcgcgagatc gcgcaggact tnangaccga cctgcggctt ccagagctcg      180
gngtgtnatg gctctgcagg aag      203

<210> 180
<211> 125
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(125)
<223> n = A,T,C or G

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<400> 180
aaggagagac aagggccttn ctgaggcagn acaaggaccc annanctacc cagtaatgca 60
nnagggcggn ccnnacgac tganctctga tcctaacctg caaagtgaag tttcaatttc 120
cactt 125

<210> 181
<211> 137
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(137)
<223> n = A,T,C or G

<400> 181
cagtggctct agttttgagg agcatctata caaaatgcat atacaantgg ttttagcata 60
aacatnggag aaaagcgtct acactganac ataagagaag ttgttactga acatgtnata 120
aataaggtgc aagaaga 137

<210> 182
<211> 360
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(360)
<223> n = A,T,C or G

<400> 182
gtgtatgatg aaaaagatac agggaggggtt cgttttgtag atcgtcagaa agaggtgaat 60
gagaatttgc cattgatttg atagcacaac agcctgtgaa tgaggtggag caccgcatca 120
taacctgcga tggaggcggt ggtgccctgg gccaccccaa ggtgtncnta aacttgga 180
aagaaacgaa aacggggaca tgtggctact gcggngctgca tttcaancag nagcatcact 240
agtgtgggnt gtgtcctgggt cctctgactc ctatggaaca tctccacgct ggggtgttctg 300
tgtgaggcca ctgctctgtg aatgggtgtcc cttgttttga ataaaggatg ctcccacat 360

<210> 183
<211> 348
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(348)
<223> n = A,T,C or G

<400> 183
tccccacctt gcatcatgga anaaaatggg tggacccgaa aaatccacca tgggtactn 60
agggtnacgc cactgcggtt tcacaaccag atgcactagg ggttcancag cnatcacttn 120
tgggagcatc tcctaccatt tatacccgagc agactgcatt ggcggnggca ggccttacc 180
acaaacgcca ncnnactntc aggnaacaca aactgcggna ctgcagcaac aagctgcagc 240
tgtnttacag cancaatatt cacaacctca gcaggccttg tatagtgtgc agcagcagtt 300
gcaacaacct cagcagacca ttttaacaca gaatacgagg ctaggga 348

<210> 184
<211> 310
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature

<222> (1)...(310)
 <223> n = A,T,C or G

<400> 184
 taagttccct ccagggcctc tgcactagna ctgcagtgtg ctccacatac atcactgtag 60
 gcctgacctc ctaacttgag ataaccggaa ccaagttcct gggatgcagt tgcatttcca 120
 acgtgatcca ctggggcatc aagagcanag gatgactgga gaggtagggg cgctgtattc 180
 ccagctcctg gctgagggcc tctccagccc caagagttgt cctggaagta gattngctgt 240
 ctccatggac atgtgancaa tgggaaaaag aagcatacat tcagnantac tgacaggaag 300
 aggacaagca 310

<210> 185
 <211> 271
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(271)
 <223> n = A,T,C or G

<400> 185
 actgagggag atctctggcn acctggnagt cacatttcat ggttgtgctc atcccttccg 60
 ggtccaggta cagagacgat gctgccacag tncgcgagca caagtaattn aaagggccag 120
 ggagtcggca acaagaactg gnaggagtna tcattcttaag ttagaagaag cagatcaaac 180
 aagtcttatg ataaaaactt tattgtctta aatatcaaag gttttacaca tcacgttttc 240
 ttcagaaagt tcctatttaa gaagaaaaat a 271

<210> 186
 <211> 389
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(389)
 <223> n = A,T,C or G

<400> 186
 acaggccata attacttntt ggggaactct caatagggcg nacaggaatc atggctggtt 60
 ccatacaaga agcccgtgcc caancatgtg atgaagggaag agcggggggg ggtgtggccc 120
 ttaccantgg caccatccga gnggccatgg nggaaaaanaa tggagagcgt gtcctcatgg 180
 aggggaagct cactcacaan atcaacaccg anagctccct ctggaccttg accccggcag 240
 gtgtgttttg gtgaatctga ncaagggttg cgagtactgg tggagtggcc atcctggagg 300
 gggaaaagcc catcgacntc gacaanatca acaagggagc cctccatggc tactgnggat 360
 gaagaggaac angcattcct ggacaaaaac 389

<210> 187
 <211> 317
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(317)
 <223> n = A,T,C or G

<400> 187
 aaagagagca cctgtgagga ctgngttnaag agcnaaccca agggggattc tgaccatttc 60
 ttcccgcctc cagccatgga ggagggggca nccattcttg tcaccacaaa aacgggtgac 120
 tacggcaagt caagtgtgcc aactgctttg caaagtgtca tggggatgga gaagccaact 180
 cactactagat aatgagcttc ctaactgggtg tgaagctgct ttgagaacct tctgtcagga 240
 gagctgggtg tttagatgtc gttaggatga ccgtttacca accaagaata cagttttttg 300

tcctttaaaaa aaaaaaa

317

<210> 188
<211> 213
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(213)
<223> n = A,T,C or G

<400> 188
actgaggctc aaaggaatga ctcaattcca agtctttcca caaacctctc agcaaacact 60
ccaacttant gaggcgcagc actggctcac atntagcatt ccancattct ggagatggag 120
agaagagagt ccaaagggtt gacccagnc tcggcctcag gcccgagtac aaaggacagc 180
cttaccanac caataaagct cacacgatga aaa 213

<210> 189
<211> 621
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(621)
<223> n = A,T,C or G

<400> 189
tacttattgt ggaactatna caggacagac atnattgaan nagttattac cntgtagagn 60
gtcnncnctgn tntnecgtgc gaccttgatc ttntttcact tgtacaagaa caaaggcagc 120
tacgtnacct atgancctgc agaaggggag cccancgcca tcctncanat ggagactgac 180
tcagccaagg gcagagagaa ggaagagtac ttcactaat gcttcccagg ctggaggggc 240
caattcttgg ctccaacact aagccgctgc ctctgtagtt aggggaacgtt tgctctaaag 300
ccaggggagt gcgttggtg atacaggcac atccactcac ctcccaggac acagccccc 360
ataccggcat cactgactcc aggggtccaga gacatggaga aagctgttca tgatgctggg 420
ccttgataag gacagtgtc gaaaccgacc accaaagagg ggccatgcct gagttggaag 480
tgaggtcaca tgctggtcca ctttgncccc tccctattna cgaccaatag cccagtcag 540
ngctatncag ncttttctgg aggcaggaca ccncaggagg ggggtcggac ccagggnagg 600
gganagggag tctgaaaaag g 621

<210> 190
<211> 431
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(431)
<223> n = A,T,C or G

<400> 190
ctgagcatcc agcgagcagc cttggtggtt ctggaaaatt actacaaagg acttcacat 60
ctataacccg aacctcctaa cagcatccaa attccgagca gccaaagcaca tggctggcct 120
gaaagtctac aatgtagatg ggcctantan taacgccact ggtcagtccc gagccatgat 180
tgctgcagca gctcggcgca gagactccag ccacaacgag ntgnattatg aagaggccga 240
acacgaacgc aggggtgaaga agcgganagc aagactggta gtggtgngg aggaagcctt 300
catccatata cancgtctcc aggctgagga gcaacanaag tctcctggag aggtgatgga 360
ccccagagag gcagcccagg ccatcttccc ttcatgggcn ggggcacttg agaantacct 420
tggggcacc a 431

<210> 191
<211> 279

<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(279)
<223> n = A,T,C or G

<400> 191
gactgaggtg gttattggtg gcagaataaa tacttaatca atggagtga tgccaacaac 60
accanaagtc caagatctct tttgttctgt gggcctgaat gtaacaacc ctcaactttct 120
catcatgcag ggcagaatta ccgaaagtat taaatatgaa accaccagag atattatcca 180
tgattgaaga agctgctgga accaggatgt atgagtacaa aaaaatagcc gccagaaaa 240
ctatagaaaa aaaggaggct aagctgaaag aaataaaaa 279

<210> 192
<211> 774
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(774)
<223> n = A,T,C or G

<400> 192
actgaatgac tgcctggagg agtcacagtc ggatatcagc ctcgagctcc ctctgagcca 60
ggagacatth tcaggcttat ggaaactact tcctccagaa gatatacctgc catcacctca 120
ctgcatggac gatctgttgc tgccccagga tgttgaggag ttttttgaag gcccaagtga 180
agccctccga gtgtcaggag ctccatggcc cctgtcatct tttgtocctt ctcaaaaaac 240
agtggccctt gccccagcca ctccatggcc cctgtcatct tttgtocctt ctcaaaaaac 300
ttaccagggc aactatggct tccacctggg ctctcctgcag tctgggacag ccaagtctgt 360
tatgtgcacg tactctcctc ccctcaataa gctattctgc cagctggcga agacgtgccc 420
tgtgcagttg tgggtcagcg ccacacctcc agctgggagc cgtgtccgcg ccatggccat 480
ctacaagaag tcacagcaca tgacggaggt cgtgagacgc tgccccacca tgagcgctgc 540
tccgatgggt atggcctggc ttcttcccag catcttatnc ggggtggaang aaatttgatt 600
cccagtatct ggaaagacag gcagactttt cgnacacccg tgggtggacct tatgagccac 660
ccgangccgg ttntgagtat ccaccattca ctacaagtna atgtgnataa ctctgcatg 720
gggggcatga accgccgact atcttacatc ntaccctgga aaattcaggg gaac 774

<210> 193
<211> 279
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(279)
<223> n = A,T,C or G

<400> 193
agctgttcca ccatactcct cttncccca tccttaccag acggctgtgt acccagtga 60
aagtgcctac cccagcaga gtccatacgc ccagcaaggc acgtactaca cacaacctct 120
gtatgcagca cctcctcagc tcattcacca caccacggng gtgcagcca atggcatgcc 180
agcaacagtc taccctgctc ccattccctt nntnctagag ncngcgggggt caccatgggn 240
gatggctgct gggaccacga tggccatgtc agcaggtac 279

<210> 194
<211> 485
<212> DNA
<213> Mus musculus

<220>

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<221> misc_feature
<222> (1)...(485)
<223> n = A,T,C or G

<400> 194
ctgaagcccc cggttgaggaga tngnncgata tttttggaag tccataagaa ggtattttctt      60
caagcangcc taataggatg gcatctaata ttttcggacc aactgaagaa cctaaaaaca      120
tacccaagag gacaaatcct ccaggaggca aaggaagtgg gatctttgat gaatcgactc      180
ctgtgcaaac tcgacaacgt ttgaatccac ccgggggggaa gaccagtgc atattttgggt      240
ccccagtcac tgccactgcg cctctggcac acccaaacaa gcccaaggat catgttttgn      300
tgtgtgaagg tgaanactct aagtctgacc tgnaggctgc ancagactcc acacccagag      360
gagagcagag tgacaaagga agctcaaaag aagtagagca tgcnaagata ccggagccca      420
cacctacagt tgacagtcac gaacccagac tggggccacg acctcgctcc cacaacaaag      480
tcctg                                           485

<210> 195
<211> 464
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(464)
<223> n = A,T,C or G

<400> 195
tgggcctaca aatcatatgg ctncactcc tgaccnanng cncagcccc antccccccc      60
tgagatttgt ggctgtgggc gactggggag ggtcccca aa tgcgccattc cacacagccc      120
gggaaatggc caatgccaaa gagatcgcca gaaccgtgca gacgatgggc gctgacttca      180
tcatgtctct gggggacaat ttctacttca ctggagtgca cgatgccagc gacaagaggt      240
tccaggagac ctttgaggac gtgttctctg accgtgccct tcgcaacatc ccctgggatg      300
tgctggctgg aaaccatgat caccttggca acgtctctgc acagattgca tactctaaga      360
tctccaagcg ctggaacttc cccagccctt actaccgttt gcgcttnaaa attccacgta      420
caaacataac tgtggccatn tttatgctgg acacagtgat gctg                                           464

<210> 196
<211> 395
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(395)
<223> n = A,T,C or G

<400> 196
cctgacaatg agaaaagctc tagaagcagn ccaaagcata tacaactcat tntctngctn      60
nagtgggtna tgaagataga tgnanttncc tcgcacantn ngcncnaact nctggatatn      120
ncangcntcn naantgngga ggagggcgtc ntncatcaat cacatctcac aggtaccagc      180
ttgcaaagac ttctgggttc attttttagtc aaatagcagc atgtgtctta agcatagtca      240
tgcatgtgct agtgaggagg atacatatct gctaagaaat gtcactagga gatgttactg      300
tggtgtagag agcacctaca tagnctgcat ggtatataag tntaccactc atttcctatg      360
gatattgtta agagngggaa atgcaagggtg catga                                           395

<210> 197
<211> 470
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(470)
<223> n = A,T,C or G

```



```
<400> 197
acatccattc ccggetacct gaacccttcc agtaggacgg aaatcctgca tttcatagac      60
aaggcaaaagc ggtcccaacca gcttcctggg cacctgactc aggagcacga tgctgtgctc      120
agtctgtctg cctacaatgt caagttggcc tggagggacg gggaggacat tatcctcagg      180
gtgcccattc acngatatcg ctgctgtctc ctatgtcccg agatgatgct gcacacctgg      240
tggtcctgaa gacagcccag gacctaggca tctctcccag ccagagtctg tgtgcagaaa      300
gttctagagg cctcagegca ggttccttgt cagaaagtgc agtggggccc agtagaggca      360
tggtgcctgg tcatcatggc cncagagagc aaggtcgccg cttgaagagc tgtgtccct      420
gctcagccng gtcttccaga tttgtttaca cggagtccac catcgacttt      470
```

```
<210> 198
<211> 489
<212> DNA
<213> Mus musculus
```

```
<400> 198
tgaggtcctg ccaccaagc catgtcttct aggcagcacc tgggctctgc tccgcctccc      60
tctaccactg atcaggatat gctctgggaa gtgggggctc aggcttcagg agaagccagg      120
actgctcttc ccaggaatgg ctgccagcac agtacagggtg gcaggcagga aggactacct      180
tgctctgctc cccctgaatg agagtgaagt cgaagaacag ttcgtgaaag gacatggccc      240
agggggccag gccaccaaca agaccagcaa ttgtgtagtg ctcaaacacg tgccctccgg      300
cattgtggtc aagtgccacc aaacaagatc tgtggatcaa aacaggaaga tagctcggaa      360
agtcctccag gagaaagtgg atgttttcta caatggtgaa aacagccccg ttcacaaaaga      420
gaagctcgag gctgagagga gaaagcgaga gaggaagaaa agagcaaagg agactctaga      480
aaaaaaaaa                                     489
```

```
<210> 199
<211> 496
<212> DNA
<213> Mus musculus
```

```
<220>
<221> misc_feature
<222> (1)...(496)
<223> n = A,T,C or G
```

```
<400> 199
gactgaggac agtgtctacg tatatgtacc aaggntccaa ggangtagat gnccttgtgg      60
ctggaggcct caatgcctga tgtttctcct gattctgcaa cggagttgtg gaagacagaa      120
cctcaagatg caggagacca gggaggcaac acttgcatcc tcagggagga agccaggatg      180
ccccagtcaa ctgggggttg tttagggtata gggttggagt cagcagagcc tacagccctg      240
ctcccagggy cagagaccct cccagagccg acagagcttc gtccacaaaa gcggaaaaag      300
ggcccagccc ccaaaatgct ggggaacgag ctgtgcagtg tctgtgggga caaagcctct      360
ggcttccatt acaacgtgct gagctgcgag ggctgcaagg gattcttccg ccgcagtgtc      420
atcaagggag cacgctatgt ctgccacagc ggtggccact gcccocatgga cacctacatg      480
cggcggaaat gccagg                                     496
```

```
<210> 200
<211> 378
<212> DNA
<213> Mus musculus
```

```
<220>
<221> misc_feature
<222> (1)...(378)
<223> n = A,T,C or G
```

```
<400> 200
agcaaagtcg gcctcaaaaa cagagaaggc aagatggctt ctgaatcaga aactttgaac      60
cccagagctc gggctentnan ctntatnnnn ancatnnnn ngcctaggnc cgtnatcann      120
gtnngtgaga nnncccttgna tcttgagnag attanntgcc cnnatactag acaagggccca      180
gggctcagga agnnngagng gntggnnat ggctagcaan ggatgagggg gatctagtca      240
tccctgcgcc catccagcag ctggtgactg gacagtctgg cctcttcact cagtacaaca      300
```

tacagaagaa agccattgac cgttcgtgag ttccgcaaga tcgccaatag ctgacaatgc	360
actggtgttt tatctgct	378

<210> 201
 <211> 385
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(385)
 <223> n = A,T,C or G

<400> 201	
ctgtatatgg gcttgccctgg cccacccgag cagacttcgc agactctgga gaggccctaa	60
tgctacantn ctgactggtc tcaccagagg caactctnga atnttttacc gagagggtgct	120
gccaatccag caggcatgca gggcagaagt cgtgtttctc catggaaaag catttaattc	180
ccacacatgg gaacagctgg ggacattgca gctactgtca gagaggggct accgggctgt	240
ggccatcgac cttccaggtn ntgggaactc agccccttca gaggaggnga gcacagaggc	300
aggccgagtg gagtagctgg agagagtgtt ccaggaccta caggtgcaaa atactgngnt	360
ggtgagcccc tcaactgagtg gcaag	385

<210> 202
 <211> 491
 <212> DNA
 <213> Mus musculus

<400> 202	
tgaggccttg tacagctcca tcaagaatga aaaattgcaa tggggccatag acgaggagga	60
gctgcgacgg tctctgtccg agttggccga tcctaacccc aaggtcatca agcgggtcag	120
cggaggcagt ggcagcagtt ccagcccctt cctggacctg actcctgagc ccggggcagc	180
tgtctacaag cacggggccc tgggtgcgaa ggtgcacgca gacctgact gcaggaagac	240
acctcgtggc aagcggggct ggaagagctt ccacgggatc ctcaagggca tgatcctcta	300
cctgcagaag gaggagtatc agcctgggaa ggctctttcc gaggcagagc tgaagaatgc	360
tatcagcatc caccacgccc tggctaccgg cgccagcgat tatagcaaga gaccacacgt	420
cttctacctg cgcacagctg actggcgggg cttcctcttc caggctccga gcctggagca	480
aatgcagtcc t	491

<210> 203
 <211> 346
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(346)
 <223> n = A,T,C or G

<400> 203	
tcaatgagaa gacagnactc tgcacttggc tgtgcattca cccccaagtg tatggaagcc	60
atntngaagc agctnctcaa ttctcctgcc atgtctctct gttcaggatg ttccctgccac	120
tgaacccgag cctggcatcc agcaagcgct agccaagagc ttagcagtga ccacttgtct	180
actcatcggg ggacggccat cagcctggag gtgaaccagg gagagtcttg actataggca	240
cggccccagc atcagtggga tcttggggga gactttgacc atcagcagag gaggtttggg	300
gggacaatgt tattaaaata aaatgaccct tgccaagaaa aaaaaa	346

<210> 204
 <211> 177
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature

```

<222> (1)...(177)
<223> n = A,T,C or G

<400> 204
aaggctgaca agcaccanac ggnaaaggca gngaagaaac tctatggcat tgatanggcc      60
aaaggcgtag gtttagcagg cttctgacta tgacactctg actgngacaa gaatattggg      120
atcatctaaa cngagtccag ctggataatt ntaaataatac ttttcccct acaataa      177

<210> 205
<211> 230
<212> DNA
<213> Mus musculus

<400> 205
actgaggata tgctgtcatt ctgggctgtc gtaatatatt tctctgcaga agagtgggaa      60
tacctgggtc ctgctcagtg gaaattatac agggatgtga cattggagaa ttacaacaac      120
tttgtttttc tggatcttgt ttctctacg ccatacctgg tcagatttct ggagcaaata      180
caagagcctt cagatgtgaa gagtcaagca gacatctcta tgtactcagg      230

<210> 206
<211> 328
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(328)
<223> n = A,T,C or G

<400> 206
tgacaccatc aaaaccaacc ctgatgacag aagaatcatc atgtgtgcct ggaacccaaa      60
agatcttccc ctgatggcac tgcctccttg ccatgccctc tgtcagttct atgtggtgaa      120
tggggaactg tcttgccagc tttaccagag gtcaggagat atgggtcttg gcgtgccctt      180
caacattgcc ngctatgctc tgctcaccta catgattgca catatcacag gcctgcagcc      240
aggtgatttt gtccacactt tgggagatgc acatatntac cngantcata tagagnnggt      300
gaaaattcag ntacagcgag aaccaaga      328

<210> 207
<211> 385
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(385)
<223> n = A,T,C or G

<400> 207
actgagggtg agtctttcct gctagaagaa gaaggacaag gtgctgnaga aggnccgnccg      60
gatagnactg aagaaagaag tagtggagga ggaggagaat ggagctgngg aagangaata      120
cgaaactgca ctggatggag aggatgntga tnaaggnntt gaagacnatg atncagctan      180
gcggcgctct nntcatgncc cctgcccctt gggcttgtgt tttggntttc ccttcnngtn      240
ctggnggtgg nccggganca cacacatccc gcccccttcc tctgtctccc ctgctctggc      300
cctnccccag agctgtgacc cttgtccctt gacccancct ctentttcca tctctccttc      360
nctgctcctt ccccttctgc ctccg      385

<210> 208
<211> 185
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature

```

<222> (1)...(185)
 <223> n = A,T,C or G

<400> 208
 catgaggaat tggaaaaactc ttctgaggat tacctntcca gcctaagggtg tggggaccct 60
 gaacatccag agngcttttc tagnctcaac attacgntgn ggcactttac cttgganggt 120
 nagcaggngg nccnttgat ganattgtga aaacctcntg aaccttctag cagagggtgc 180
 tcgaa 185

<210> 209
 <211> 472
 <212> DNA
 <213> Mus musculus

<400> 209
 cttgcttggc tcgtccaggt gccaacagga ccctggttct gcaggaaatg tgaatctcag 60
 gagcgtgcag ccagggtgag gtgtgagctg tgcccgcaca aagatggggc attgaagagg 120
 actgacaatg gaggctgggc ccatgtggtg tgccgctctt acatcccga ggtgcagttc 180
 gccaacgtgc tcacgatgga gcccatcgtt ctgcagtagc tgccctcatga tcgcttcaac 240
 aagacctgtt acatctgtga ggaacagggc cgggagagca aagctgcctc gggagcctgc 300
 atgacctgta accgccacgg atgccgacaa gctttccatg tcacctgtgc ccagatggct 360
 ggcctgctgt gtgaggaaga agtcctggag gtggacaacg gtcaagtact gcggctactg 420
 caaataccac tttcagcaag atgaagacat tcccggccac ttccagcggg gg 472

<210> 210
 <211> 863
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(863)
 <223> n = A,T,C or G

<400> 210
 gatctgagt tggctctgta caaacatttc ctttcccctc gcgatgggga gacctgctcc 60
 ggtgcatcca gagaactccg catcctctgc tgtgatatag atccagtcct tgtggagagg 120
 gctgaaagag actgtccctt ccctgaggct ttgaccttta tcacctgga catcatggat 180
 caagagagca ggaaggttcc cttgagttct ttcttgagcc agtttgggcg ttccgttttt 240
 gacatggtct tctgcatgtc agtaaccatg tggattcatc tgaaccacgg ggaccgtggt 300
 ctgtgcgagt tcctggccca cgtctcctct ctctgcagct acctcctcgt ggagccacaa 360
 ccctggaagt gttaccgggc agctgcaagg cgctgcgca agctgggact ccacagtttt 420
 gatcacttcc gtcgctggc catccgaggt gacatggcca agcagatcgt gcggatcttg 480
 acgcaggacc acgggatgga gttagcgtgc tgtttcggca acaccagttg ggaccgaagc 540
 cttctgctct tcagagcaaa gcacacccac gagactangc aatccccgaa tcgtcaacaa 600
 aaagagacac ngacagatta agaatncgaa aggccacggg acacacacca gtaaagagat 660
 acccggggag cttttaacac cggagaaaac gagtttgat cccagagaca tcaggcaagc 720
 ctttganaac tggcaagggg cttttggcna aaatgtcttg aaaccaagcc ggcttgaaaa 780
 gggcnccagt ncccggttn cccctggttg gntttggnaa aaaacttncc cncgggnaa 840
 atgaaattcc cccgggggac aaa 863

<210> 211
 <211> 143
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(143)
 <223> n = A,T,C or G

<400> 211
 cagagactga ccagtgtgga cgtgcggaac acagnagact caccagtgtg gattaggacg 60

tgccctcttga ggtggtaact gctccgaaag gctccaaagc agtggttcaca aataaaattt	120
ttgggaatct ttaaaaaaaa aaa	143

<210> 212
 <211> 250
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(250)
 <223> n = A,T,C or G

<400> 212	
aaaccttact ggaacctcac aggttatagg ctacaccttg cnaaaacccat tantatnnga	60
aagactttgt caaagntcaa gaagaaatga naggnatcgt aagtnatcat agcgnatgag	120
aaactctatn attttttctg agnggggggt anagcctttn cattgtccca ctcactctcca	180
aagngactat aagaagacnn ntnggagata agancncatn gaacattaac caactgtggg	240
taaagcgctt	250

<210> 213
 <211> 399
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(399)
 <223> n = A,T,C or G

<400> 213	
atggaccgag ccctctgcaa tacaaccgct gtttggaac ttcactttct tactgagcct	60
ggctgtctgc tacatgctcc ctgtggagtg gaacatccgc agacatttta aaggaacagc	120
tttgtgtccc accanagggt ctgaggactg aacacatgga ctcatacatc atacatgggt	180
aagctctccc atctatcacc tagcttcagg tttgtcagcc atctctccac atacacatta	240
agcatntgaa ataagacact gctgatattg gatgatagca aggttcagaa gacctggcag	300
aggatnttcg atgancttct gtcctcaagg aatcgantac aggacttcta cttgcagaaa	360
aggcaagaat ggctnattag ggaaaaagga tattcccaa	399

<210> 214
 <211> 323
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(323)
 <223> n = A,T,C or G

<400> 214	
atgaccgttt tgatgaanat gacaaagatg attctgnctg gntnttanac catgattatt	60
tggaaaacat gnatgggatg ntcaagangg tcantgccat anaaaggata gttgggtgggt	120
nccacacagg ccccanttnt gcacangagg ggatatccgc catcaatgaa ctcatagaaga	180
gatnetgccc caactcanta ttggtcatta tcnacngaa nccaanggac ctangacttc	240
ccaccgaanc ctacatcctc agtgnaggaa gctcatcgac tatggnacgc caacgtcaat	300
anacttttga gcatgtgact agc	323

<210> 215
 <211> 416
 <212> DNA
 <213> Mus musculus

<220>

<221> misc_feature
 <222> (1)...(416)
 <223> n = A,T,C or G

<400> 215
 cccagtcacg ttaaattgtag gtggacactt gtacaccgac atcgcttacc acagttgaca 60
 cgctacccgg attctatgct tggagctatg tttgggggtg acttccccac agcccgagac 120
 cctcaaggca attacttcat tgatcgagac ggaccgctct tccgctatgt ccttaacttc 180
 ctacggactt cagaactgac actccccctg gactttaagg agtttgatct gcttcggaaa 240
 gaggctgatt tctaccagat cgaacccttg attcagtgtc tcaatgaccc caggcctctg 300
 tatectatgg atacttttga agaagtcgta nagctgtcta gcactcggaa gctttctaaa 360
 tattccaatc cggggggcgg catcatcncc cantttaacc attcaccccc gaaagg 416

<210> 216
 <211> 317
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(317)
 <223> n = A,T,C or G

<400> 216
 gatgactgcc tgccttttnac cttggagacn gtgtacagct ggnanctgna agcctgggat 60
 gaggatctgc aggaggtcct gtcctcagat gaaattgggg gcacctatat ctcaccccca 120
 ggaaacgaag aggaagaatc aaaaaccttc actactcttg accctgogtc cctagcttgg 180
 ctgacagagg agccagggcc aacagaggtc acacgcacat cccaaagccc tcgctctcca 240
 gattccagtc agagttctat ggcccaggag gaagaggagg aagagcaagg aagaactagg 300
 aaacggtaaa cagagtg 317

<210> 217
 <211> 235
 <212> DNA
 <213> Mus musculus

<400> 217
 acacgaatag catagtcatc tggaagagaa gaaacaccag tcaactccctt cgaggagtct 60
 actgaggaag aaagagaaca ggaggaggcg gctgctctca aaatccagtc cctcttccgg 120
 ggacacgtgg ctagagaaga ggtaaagaag atgaagtcag ataagaatga gaatctgaaa 180
 gaagaggcag acaatctgag accacagggtt ttacaccccc gaaacatgaa aagta 235

<210> 218
 <211> 355
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(355)
 <223> n = A,T,C or G

<400> 218
 acaacgttcg tgcggntcgg tnaggggttg tngctggcc ctatgacang gatgaatggc 60
 cagtcaacaa aagtgagcat ctttctctgt ctttcacatt cttccttcat ggagagagta 120
 accgtgtgca caagtgtgga gatagctcag caccagccga tctatttgat caacgaggac 180
 gggctgtaaa ctatgatatt gtaatcttta ccacttggga ttgcttcctc tcagagttca 240
 ccagaacttt gaatttctct ctctctctct ctttttttaa tgggctgttt ttactgcagg 300
 ggcttttctt ccctagaaac ccaactctac gcagaaaaag tgaaaaggaa aaaaa 355

<210> 219
 <211> 120
 <212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(120)

<223> n = A,T,C or G

<400> 219

ttggttccac	gtacgtcagn	tctgctcatt	atcantgacg	gcggnatctg	cgacgtgaca	60
cataccatag	angccatcgt	nagtgccttc	tcactgcca	tgtactatca	ttattgtcgg	120

<210> 220

<211> 265

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(265)

<223> n = A,T,C or G

<400> 220

gggagcagat	ggactatgga	ctacagttta	cctcctcgcg	aaagtccctc	agcatctctc	60
ctattgnact	ttacctcctg	gccagcttct	acaccaagtn	cgatgctgct	cacttcctca	120
tcaacactgc	ctcgctgctc	agcgtgctgc	tgcctnngct	accccagttc	catgggggtnc	180
gactcttttg	aatcaacaaa	tactaaanga	nggttggtta	gttctgcagg	cattgaggga	240
aggcactgga	actaagatat	aatgt				265

<210> 221

<211> 375

<212> DNA

<213> Mus musculus

<400> 221

gactgagcct	ccctgctgga	gagggagcac	ccccccacc	ccccagggcc	tggagcctac	60
ctgccagcat	cctgggagat	ggtaacagac	acgtccagtc	ccagtgtggt	cacccttttg	120
cacacggcgt	ccatgtcgat	gatggagtcg	atgctctcgg	gaccatcctc	cacgcagcac	180
tgagagccgg	ggcagaaccg	gcaattatcc	agtcctttgt	aacccttggt	gtgcccacat	240
ttttccagcg	tactgtggt	ggccatgccc	gacaccccaa	catgcactac	gagctgggga	300
caagagacaa	ttgggggacg	gttagcagga	gcagcaccca	cccatacatc	gtgagatgcc	360
aggacttgga	aggtg					375

<210> 222

<211> 102

<212> DNA

<213> Mus musculus

<400> 222

acctagcaga	tgtcacacag	acgataaata	gcaaagatgg	aagtcttcat	gccggaggca	60
atcctataag	acagctgagt	tctgcagagc	tggagacaga	ct		102

<210> 223

<211> 498

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(498)

<223> n = A,T,C or G

<400> 223

ttcctctctc	gttcaaatcc	tgtagtgca	atgatcaaan	tctgtngacc	cacatnatcc	60
------------	------------	-----------	------------	------------	------------	----

gcctagtgtg	caacgaggtg	acnacactga	cggnanaccc	acctganggg	attananact	120
tccgcaatga	tgaggtatct	ncacagacct	gcaggttacc	atcgagggcc	ctgatangga	180
ctncctatgc	tggaggtctg	ttccgtatga	aagctcctac	tggggaagga	ctnccttgcc	240
ccccaccca	agggtactt	cctgactaaa	anattccacc	caantggtgg	gcccccaatt	300
ggccgagatc	ntgntgncca	natgtgcttc	aannnagngg	acctgngann	ggnnctgnaa	360
tctggggctt	taccnaatat	agtagcctng	gttgcnccaa	tnaaangngn	ccttgggtctg	420
gatnccacc	ccttaaacc	cannaanttc	tggnannttc	aattagaaan	gaagggcaaa	480
ggcccgccct	ttgccttt					498

<210> 224
 <211> 502
 <212> DNA
 <213> Mus musculus
 <220>
 <221> misc_feature
 <222> (1)...(502)
 <223> n = A,T,C or G

<400> 224						
agactgagaa	tgctcgtgat	tcctgtccct	tggattgtaa	ggtttatgta	ggtaatcttg	60
gaaataatgg	aaacaagact	gaattagaac	gggcttttgg	ctattatgga	ccactcagaa	120
gtgtgtgggt	tgctcgaaac	cctcctggct	ttgctttcgt	cgaatttgag	gatccccgag	180
atgctgctga	tgctgtccgg	gaactagatg	gaagaacact	gtgtggctgc	cgtgtaagag	240
tggaactgtc	gaatggtgaa	aagagaagtc	ggaatcgtgg	gccgcctccc	tcttgggggtc	300
gtcgtcctcg	agatgattac	cgcaggagga	gtcctccacc	tcggcgcaga	tcaccaagaa	360
ggagaagctt	ttcccgaagc	cggagcaggt	cactttctag	agataggaga	aaaaaaaggt	420
ctcttgtctc	gtgagagaaa	tcacaagccc	gctcgatcct	tctcttaggc	tcgnaaccce	480
tctanggcc	atgaaaggga	at				502

<210> 225
 <211> 556
 <212> DNA
 <213> Mus musculus
 <220>
 <221> misc_feature
 <222> (1)...(556)
 <223> n = A,T,C or G

<400> 225						
tgccgctggt	cctcctgctg	agagccctga	gctattcnan	agatgacact	gnntgcngct	60
gtnggaccnc	cgcagccacn	ctctnnccgg	tcggcnctcc	ctccttggac	ngnnattnta	120
tgaataaaca	tcnnaaccag	tactatcagg	ccagcgggtc	aaaacccgga	aaagggatga	180
agaaaagaat	ttcnaaccce	cncctttncag	ggatacactt	gtccaggggc	ttantnaacc	240
tggtgataac	cttgaanctg	tagccaaatt	tttggattct	actggctcac	nattagatta	300
ccgtcgctat	gcaaacacac	tctttgatat	cctgggtggc	ggcagtatgc	ttgcccctgg	360
aggaacacnc	ntnnacaatg	gtgacnagga	ccaagatgac	cancactgt	gtgttttcag	420
caaataaaaa	tcataaaacc	atccgaaact	atgctcaggt	cttcaataaa	ctcatcaggg	480
agatacaatt	tatttggaat	aggcatttga	anatgaaatg	aaaaaacttc	tcctcttcct	540
taaagcattt	tctgaa					556

<210> 226
 <211> 198
 <212> DNA
 <213> Mus musculus
 <220>
 <221> misc_feature
 <222> (1)...(198)
 <223> n = A,T,C or G

<400> 226

aacgacgaaa	catcancaga	actttattga	gantggattc	tgagactann	catgacactg	60
angaggcacn	gcaagtgact	cctncaatga	cnagntccan	gagatccatn	ngcaanaatc	120
tatgggnggg	ccggggggccc	cagtcenntt	catgcaggat	ntatctgcga	ctttcagaan	180
ntggggaggc	tgacattg					198

<210> 227
 <211> 446
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(446)
 <223> n = A,T,C or G

<400> 227						
agtctgagct	ttgacgactt	cctggacctt	ctgagtcggt	ttcanngaca	naggaacccc	60
nnacatgang	ccncactatg	ncttncgnat	cttngactnn	tnngacnatg	gaccnttgga	120
cagagaagac	ctgagccntc	ttgagaatct	gcctcacagg	agagagggcg	aggacactng	180
gctaanacgc	ttctgagatg	aacccagntg	attagacaat	nncctggaag	agtaanacat	240
ctgacagggg	tgggaccatc	tatnttncg	aggtccaaca	tgtgatctcg	cgctcaccag	300
actttgccag	ntnctttaag	atngtntctg	gatgtctttn	aagnccaac	atgcctggcc	360
aaggacctgg	ccactgctga	gatgtggcca	aggttatgcc	tgcggtgnca	ggncnctg	420
cggcccagnc	tggagagggc	gctgga				446

<210> 228
 <211> 354
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(354)
 <223> n = A,T,C or G

<400> 228						
ccccactgtt	tcagggatgt	acacgatcgg	agacattgtc	cacagttggn	gagtgcactg	60
cccctgagca	ggactgtgcg	atnnactgtg	ctcanggtcc	ccaaggctgc	tgggcnanga	120
agncgnntca	gaantnctaa	ggggactctg	gccaatgnnc	tagancaant	naagtntttt	180
tccaacgtnt	aaaaacacat	anaanaccnc	cagcctatgn	cccncttctg	ctcccggatc	240
acgtcctgtc	ggtaacatta	gccacagtcc	aaagatggca	cagccaagga	tggagccaag	300
tctccacacc	aaaatctatg	atggcccacg	tctgactcaa	gttaaaaaaa	aaaa	354

<210> 229
 <211> 186
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(186)
 <223> n = A,T,C or G

<400> 229						
gttgccagtg	ttgctgattg	ngatacaaga	tnгнаaggag	ccngggtnnt	ncattggana	60
ggctcttctc	cctggagcat	cccggcttct	atcttacaag	atgcttgnat	acagncttct	120
gataaagatc	tggaacgcct	ttcnggntgc	tntataggag	ggaanttctg	ttatattgga	180
gaacac						186

<210> 230
 <211> 665
 <212> DNA
 <213> Mus musculus

```

<220>
<221> misc_feature
<222> (1)...(665)
<223> n = A,T,C or G

<400> 230
agcaagctgc acatggaagg gttccgaagc ctcaaggagg gtgaggcggg ggagttcacc      60
tttaagaagt ctgccaaggg tctggaatcc atccgtgtca ctggccctgg tgggtgtgttc      120
tgtattggaa gtgagcggcg gccaaagggg aagaacatgc agaagcgaag atccaaagga      180
gacaggtgct acaactgcgg tgggctagac catcatgcca aggaatgcaa gctgccaccc      240
cagcccaaga agtgccactt ttgccaagc atcaaccata tgggtggcctc gtgtccactg      300
aaggccccagc agggccccag ttctcagga aagcctgnct acttccngna ggaataggaa      360
gagatccaca gccntgncct gctccnagaa ncccagaatt gangcccagg agtcagggtt      420
attcttttgc natggggagt ttaangaaag aggcataaat ctgnacagtg ntnaangtgt      480
nngtaanggt nggnttttgc tggnttanen ttngnctgnc gagnctnnnn gccggncttc      540
ccaacgtcat cctgctttcc ttnaagntan tgaaaggatt aggcnaatgg aactctaccc      600
nactnttnnc tgaagcnagc gaagcttttn tgngggaggga accncccttg aacccccgagg      660
ctttt                                         665

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<210> 231
<211> 105
<212> DNA
<213> Mus musculus

```

```

<220>
<221> misc_feature
<222> (1)...(105)
<223> n = A,T,C or G

<400> 231
tagtctggaa ccacgccgng ggaggatcta cagaaatatt gctggcgcag acacatttcc      60
agttgtctga ggtggccagg acattactcc cgtgcgcctt accca                      105

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<210> 232
<211> 199
<212> DNA
<213> Mus musculus

```

```

<220>
<221> misc_feature
<222> (1)...(199)
<223> n = A,T,C or G

```

```

<400> 232
accatttttg atttttgtac ccatataaag tctctgaaac tcaagtcaag gaatcttctg      60
aagacaaaca acagttttcc tccaactgga ccatgtaatt taaagctgaa cggcagtcag      120
caagtactgg ttgancacag ttatgccttt aggaacccta tggaggcgaa aaaaaggata      180
attaaactag aaaaggaaa                                         199

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<210> 233
<211> 530
<212> DNA
<213> Mus musculus

```

```

<220>
<221> misc_feature
<222> (1)...(530)
<223> n = A,T,C or G

```

```

<400> 233
ggatcatgaa gtgatataca gtcattttca gggaccatta nagggtncta tagaaccagc      60
tactccaact gaagtcgtca gcaatggggc acctctncag cctgnccctg ctgaactggc      120
caatagccaa gngggagcac atgttcagcc tgccccgtnt gaagtgggtca gcagccaana      180

```

tggactgnnc	actctacagc	ctctgncacc	agcatncatt	gatttgacgg	aggaagtaca	240
gccctcagaa	gaaaatatgg	aggttgtcaa	tcctggaact	tcagaggagc	ctagtcaggg	300
atctgggtgct	aacccaaccg	ccggagctgc	tagatccgtt	tcaatgaaca	acttcatcag	360
cnggctgcag	aggcttcata	acatgctgga	attgctgana	cctccacctg	cagaccacag	420
tgtggggcca	ntaanancaa	ggaggaggat	ggcacccatt	ttgagggcca	gagctggaga	480
gtctcanagg	caagacaatg	gcaggatatgt	gccacataca	ccactatatg		530

<210> 234
 <211> 281
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(281)
 <223> n = A,T,C or G

<400> 234	
gaactgagag	aagaaganaa
caaaggacca	gtgttcaaag
caaaagttaa	tttgaggagaa
agaaaacttt	acagaataga
ccaaactccc	cagctccccc
	tnttcaagta
	gactcaaaaa
	a
	60
	120
	180
	240
	281

<210> 235
 <211> 353
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(353)
 <223> n = A,T,C or G

<400> 235	
tgagtttgtg	agggactgca
cccattgaag	accatgaagg
ctggaagtgt	tgatgctaaa
ngatgactct	ncgacattgg
gtgtgtggat	catggtaaac
actngtcatt	gcactctttt
	gttgacnccc
	agnctttgct
	gtattacatt
	aaa
	60
	120
	180
	240
	300
	353

<210> 236
 <211> 448
 <212> DNA
 <213> Mus musculus

<400> 236	
gactgagaga	tgttatgaac
cctttccaat	cccaaatttg
tgaactgttt	gggaaaaaag
acttaaagag	tcatgtgtgt
atgatgaagc	cattaagtgc
tcttaagaga	tctttcctta
caagatacca	gttgcttcag
ttgcttacca	tttattagaa
	gactatga
	60
	120
	180
	240
	300
	360
	420
	448

<210> 237
 <211> 227
 <212> DNA
 <213> Mus musculus

<220>

<221> misc_feature
 <222> (1)...(227)
 <223> n = A,T,C or G

<400> 237
 gaggcctcag cagttctacc tgtcatcana tcaggagcat cagtgttgct gccgcgttga 60
 atgagnatgg ctgcaaagct attctcatca aatgatgtcc cattcaccac agggaggtct 120
 tcaaaggggt ttacagactg gtctgaagac acagtgatgt actggacggc cagccagagt 180
 gcagtgtctgc cttcgtgatn tttcagctct aaatctaata tgaaata 227

<210> 238
 <211> 539
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(539)
 <223> n = A,T,C or G

<400> 238
 gaaagaagct gacgacagaa gggctgagga cctgggcacn accacttacc gaccacttcg 60
 tngnctggct gaaagancgt taccttcctg ccaactaaag agcagaaata gtctacagat 120
 aaggaaaact gaagtaaaat ggcctcataa tcaatncatc ctttggtacc aagatatgta 180
 cacacggaca gctctcagac ggaatcctag ctgcatagag tgctcatcct gccaaatnag 240
 cccaggtctt gctcactagt gattccacac actagcaatt ccacatggta ggtcatcatt 300
 gcccttnttg aactcaagtg caagtgtgag tgtgagctca cctggctatg ccatgtatct 360
 tactcataaa cctcttccca tcgccctgag gccaaactgt tatcacctcc tgctgacttc 420
 ctttcctcac tattgcttcc gtcggctcagt ccctcttctg tcatcaactgt ttagcttatg 480
 gactttgntg nngggagccg cgccacatt tcgncgntac aagatggcgc tgacagctg 539

<210> 239
 <211> 135
 <212> DNA
 <213> Mus musculus

<400> 239
 gactgagagg cttctcgaga gacgaatgct gttctgtgcc tgatgaaagg cttgaaactg 60
 acgagcggaa aagaaatttg ttctattott aaatggggac aaataaatga taaatatctt 120
 ttctaaaaaa aaaaa 135

<210> 240
 <211> 486
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(486)
 <223> n = A,T,C or G

<400> 240
 caggtaggcc tgccaaacgt atangtganc cccctgtncn natgatgggn ttcctgngag 60
 ggagagnccg gtgaccgaca tgcctantga gcctggcact natggtgctg aatcccggnc 120
 tggntgcctg nggatcagca gacaattggg gccgtgggag agtctctggt acgcctcatt 180
 aacgaccgag gagacggaga agggtagcga ttatggttta gggctagatg cagccgtang 240
 ggccaccgta taccaggtca gaagccaaac gaaangtcaa acaccagcg ggcaagctcg 300
 cgacgcgcct cagcaacgac accgccaagn tctcgtggga ggagcgcgac tggcggcact 360
 ctgcgcggaaa gtggaagctc ccgcaagcag gcggggggcg tgaccgnaag aaggtgtatt 420
 tcaaagtggg taatagatgg ttttctcacc caataaaant gcaatttatc ctcttaaaaa 480
 aaaaaa 486

<210> 241

<211> 154
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(154)
 <223> n = A,T,C or G

 <400> 241
 tgatttacct actgaggacc cttagatcct gtggatacct ganaattgat tcatctgtnt 60
 gtagctgagg cttggcacct gcaagctttn cctctcctgg catttcacca agcccccgag 120
 ctcacagggc tctggctccc ctgaagtcct ggg 154

 <210> 242
 <211> 375
 <212> DNA
 <213> Mus musculus

 <400> 242
 agaagtgttt ctattttgag tgtcgaacac aacactcgaa agcgggtcac aagcaggagc 60
 ccgattagg gtttagtttt ggtatgtgtc cctccctttg acttgaagggt ctgcctgggc 120
 tgtgtctgta acatgatgtc tgttgatgag tggagcagac acctgcccac agttggctcc 180
 tggtaactcc cgtctgctgg actgcgttgc cttcttccgt atgctctccc gaaaactgcg 240
 ttgccttctt ctgtatgtc tcccgaacac tcaagtgttc tcaggcggcc tctatggtgt 300
 cttttctctt ctttcccaaa tggtagccca aataaatgaa tatatatgaa tcgttttcaa 360
 cctacaaaa aaaaa 375

 <210> 243
 <211> 153
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(153)
 <223> n = A,T,C or G

 <400> 243
 gcctctggga tctcttcctc cttcnngnag cggactgacc acagcaggat cttcttctca 60
 aaatctgtgg gcttgtgcag cnggcacccc gtgtctgtna gactctgtgg ggaaaacagg 120
 aatctggctt gagactttaa tgctcaaatc aag 153

 <210> 244
 <211> 239
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(239)
 <223> n = A,T,C or G

 <400> 244
 aaaatgccat aagtcctgtg ccatnaagaa tatgctngac ctncctttgag aaaaccaacg 60
 agatgcgttc tgaacttcaa caatcatgtc catgngtgct ggctgcaaca gatgagttag 120
 cggctttcat ncaccagtac ccgcaccttg gnggnntgaa acnnngatct ggacagcatt 180
 ttncaaagga tcaagacact nnaggggaaa ctaatnccag ncagcactcc ataggcctt 239

 <210> 245
 <211> 174
 <212> DNA
 <213> Mus musculus

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<220>
<221> misc_feature
<222> (1)...(174)
<223> n = A,T,C or G

<400> 245
gaaaagattg aggaagtgtt tcacgtggaa ccccaactac agagactctt ttataggggc      60
aaacagatgg aggatggcca cacactcttc gattatgatg tgcagcctca atgacacaat      120
ccagctgctc gtgcgcnggg nggntggcac tgccctctcag tacaaaaaaa caaa          174

<210> 246
<211> 245
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(245)
<223> n = A,T,C or G

<400> 246
cccgaacctg ccaatnctac tttggcttca gtggatggtc gaaaaggatc atcaagggca      60
gtcctcgttt cttatgaaga ggaagacagc tcacaagctt gncttccaag gcgggctgta      120
ntcagatgcc ttccagatgc gtgaccantc ngnggntctg gaaagtggna ggntcgcggt      180
ggagtacagg cccacgggng angatntana tgccagaaaag naaagaagag ctgcgagaat      240
ttaat                                          245

<210> 247
<211> 176
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(176)
<223> n = A,T,C or G

<400> 247
tgcccactca ctccattctc annacctctc ttcctcatgn nnatgaatca ggatggnaag      60
ttctnagnct acatgctcta gcatcatacc tgnctgncag atgccgngct ccctgncatg      120
atgntcntga actcaccctt taaaactgna agccctcnat aaagcctttc ttctac          176

<210> 248
<211> 399
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(399)
<223> n = A,T,C or G

<400> 248
cttgtctctg tgtagtagcc caaatcctaa tctccagtga aaccctccac atgcatgata      60
ttgggtctcca gcagctctgg aactgcccg tcaccgacac ctacctgatg tcaggactgt      120
cccgactctg gggaggtatg acatctttac gtggaagtca gttcccaaag gaactattca      180
gaagctagct cactgaagga gaccaagaac aagctggagt tgatccccctc actctgggta      240
aggtgcacct tggtttggtg cactcacaatg gtgttcacag ccattttacaa ctccagttnc      300
aaaggatcta acaccctttt ctgacctctc tggncatcag gcatgcatgt ggtgcacaga      360
cttacatgta ggcaagacac ataaaataaa aatgaagag                                     399

<210> 249
<211> 127

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<212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(127)
 <223> n = A,T,C or G

 <400> 249
 ccattccatga aagctctgag acagagactg ggtccangag tacattagca gccgnatngt 60
 ntggangngg tcaganggtg tgntatattg aaggtnttcg ganntattat atctaggggg 120
 ggggaga 127

 <210> 250
 <211> 411
 <212> DNA
 <213> Mus musculus

 <400> 250
 gatgctgact gcaggggatgg aggaactttt tccactgcag aagaacaatg tgggtgcctat 60
 gggaacatgc catgtgacca ttctccattc ctcccagcaa ggcacgctgg gtgatgtgaa 120
 gaaccagga aggaaagctg gaggagagca tgggtgggtgg cagagcggga tttggggaag 180
 ccctgagccc tgctccatct gacctcagt acatctgtct ccgtcactgt ctacctgcc 240
 tgctcacgcy tgccccctcac tcaccccacg gcaacaggcc tatctttccc ccaacatcaa 300
 aagagctatt tcagcgactg tcgctgtacc tggcccatag cctctagtct atatatgtct 360
 gtcaaatagaa ttggctataa acatgaaaag gtttctcctg aaaaaaaaaa a 411

 <210> 251
 <211> 144
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(144)
 <223> n = A,T,C or G

 <400> 251
 catatgagag cggagccttg cangnacctg gattcagang aataccacnn ccgctatggn 60
 tctngnctg tattgggctg antacctgcc agnatccaca gagtggttg tgncaccaca 120
 gcaggaccca aaagacatgt attg 144

 <210> 252
 <211> 244
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(244)
 <223> n = A,T,C or G

 <400> 252
 catggcggca tacaancatg tgggtancgag atctgacgcc ctcttggtgga gngtctgaag 60
 tcaactacng ttgtacttat gtataatant naatnnttct tttnnanaaa gttgacaaag 120
 aatcnctana gcagcctcgg ccatncacag acagnctcgc gtttttctcc tactntgtgc 180
 ttatgctntt aaatggcaga ctcgacgggg cngnggtggc ngcacgcctt ttaatccctg 240
 cact 244

 <210> 253
 <211> 211
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(211)
 <223> n = A,T,C or G

<400> 253
 gaactgagat gacaacctga gaaagctaata tttaaaaaat gatgccgggt agcaagcata 60
 atagtaacag aattgtgctg ttttctggta tccccacccc catttgaacg gcgtgttctc 120
 gatgtcgcta caagtttgtt caaatgacag atgnaactna aaangctgtt actgctattg 180
 atgaataaca tactactctc aaaaaaaaaa a 211

<210> 254
 <211> 216
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(216)
 <223> n = A,T,C or G

<400> 254
 caccctcaac cactggtgat aagccngntg tgttncncnc atctcaagac ttgctctgca 60
 atgtcggaca cctcggccaa gccttgatta tcaaggagag actggaagat aaacagaggt 120
 caaaaagccc acttgattag ggagttagga tctggtacca ctgcagctgg tgaggagaga 180
 gagcaagaga tggaaaaang ggagcttacc taagaa 216

<210> 255
 <211> 278
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(278)
 <223> n = A,T,C or G

<400> 255
 aagacttgct ggacgtggag gaaattgtca gcgtccgtgg ctncagcctg gaggagaagc 60
 tacgtagcca gttataccag ggggacttcg tgcattgctat ggaaggcaaa gattttaact 120
 atgagtaccg tacagagaga agctntcagg gtccccctgg tttttcggga caaggatgga 180
 ctagggatca agatgccaga cnttgatttc acagtccgag acgtcaaact cctggtgggt 240
 aagtgccaa ggccgggtag gagaagggaa gggaggct 278

<210> 256
 <211> 178
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(178)
 <223> n = A,T,C or G

<400> 256
 cactggacac gagctcgcat aatcagaaag gctttatcca gaggacttct aactgatga 60
 tgatgaagga atgttatcag acatgggccc agcctggagc ngtgaagccg gaaccagtt 120
 acacagattn agncctnatg anagtccagg tcngaaaaga gttcccgtgc cttacgt 178

<210> 257
 <211> 270
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(270)
 <223> n = A,T,C or G

<400> 257
 cggccaccg tgcgcccag actgaanaag actgncanaa actatgacca atcanngagc 60
 agcatcaacg gacatctatc caatnggnac gtgctaggnc ggtacctacn gaacaagacg 120
 gncggnctca cctgtnttnc tacggtggga ttgagaggta nccgcatagt gcgacactag 180
 aacnanncaa aaggncgcag cacaagttac gccactacg ggggtgtatgn tgggaaaggg 240
 cgctgcgca gaggtgctct cctggatctg 270

<210> 258
 <211> 261
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(261)
 <223> n = A,T,C or G

<400> 258
 aatccggtac gaattttttag ggctcatggc cgggccggcc gttcatcatc ttgaggcagg 60
 ttccacgaga ggtttgacct cgactccaac tataggaaaa acaacgactc caaacgccgt 120
 gaccgagcta cgtctctnct ccgcgctcta ggctgaaggc cattccgacc tgctattnta 180
 ggagacatnn aaacctatg ctgcctcaaa ctcaaacttg cagcaatcct cctgccttca 240
 gcttcccccc acccaccgtg c 261

<210> 259
 <211> 407
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(407)
 <223> n = A,T,C or G

<400> 259
 ctgcggtggc acctggggcc tggcngtctn tacntattgt ggaacnatnn ctgngcaggc 60
 nntncngngt acataacctg ngtnaattcc aatgcgcatg cngcagggtg tcttggaggc 120
 ctatggcggg atgctngaag gagccgtaca gcatngagca nngcnagngc cnttcgggnt 180
 acctatngga ncatggagct ggccattcct cactgggagc cctgagaccn ccatgtangc 240
 ancnncaatg gtctctacct gcggggcggg ggagaaatna ggacnagctt tgccctgcgtt 300
 ggancnnaca gnataanagc agngctntgt gccattcggg ctacctctcg ggcattggagc 360
 tgnccattcc tcactgggag ccctgatacc accatgtaag catcacc 407

<210> 260
 <211> 196
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(196)
 <223> n = A,T,C or G

<400> 260
 gggttacggc catatggaca nctcaagcgc ctgctagaag cagccagttc tgggtaggcc 60
 acaggggact cagcatcctg acaacagcag ttcacctttc caaaagggaa ggtaactctg 120
 aagccgccat tcacatccgg acccaggtg ctccctttccc ttacaacgga gccactttcc 180
 cctccaaaaa aaaaaa 196

<210> 261
 <211> 268
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(268)
 <223> n = A,T,C or G

<400> 261
 actgagccca ggagactcat tggaggaagg tgtatatcca agagcaaatt gaccagaagg 60
 actcttccat tactgaagct ggncatggna ctcatacagga gtgcagggtc tttgtgaatc 120
 acccacgctc caggtgagat ttttaatttg tatagttagc tataaactgc ccaagggact 180
 tcctggatgat gtaactgcct ttgagtcacc cgtgtacctt taagtggcct caataaannc 240
 aatgggttcac caagctgaaa aaaaaaaaaa 268

<210> 262
 <211> 324
 <212> DNA
 <213> Mus musculus

<400> 262
 cttctcacc atgaagggag ggcattgtgg gcaggaacca gagacctcct gcagggtcaag 60
 tgcagacaca gagcagggtc acttctctcag ccacctcag cacctagaga agccctagct 120
 ccattgcagga cgaagagcct aactccccac ctcattgcctg tcaccaagac tggcctcttc 180
 tctgtccttc cactttctta tgcaaggcag tgggtgtctgc tcagccctgg gcgtactctg 240
 tcctcacagg ccctgcactt tagggccctg gtgtcatgac ctgtggaaga agaaggttgt 300
 agttggtagt ttccagattc ctgc 324

<210> 263
 <211> 298
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(298)
 <223> n = A,T,C or G

<400> 263
 tgagggtatta tggctnaggt ctgtctgttc ctganccggt ggaaaactgc cgaantttgn 60
 natcngtgna gcggnagtgg caggnccttgn tatgngctta nccaactgtg tgntgagaag 120
 ggacatgtca ccggaatana catgactgan gtccagggtcc aagngtctaa aacctatntt 180
 gaacaccaca tggaaaaatt tnggtttcca ggcacccaat gtgacttttt ctccacggnc 240
 gcatcgagaa gttgncagan gctgggatcc agagngagag ctatgatatt gtcattgtg 298

<210> 264
 <211> 215
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(215)
 <223> n = A,T,C or G

<400> 264
 actgcccttt gagaataaaa tgggaggcca caaccaaagt cttttggata aagcaccaca 60
 atggacaatg naaggnagnc tgccttactc tnactncttn nnaaggcaca ganctttgac 120
 attatggtaa agancctcan ttctaactctg tttctctctg ctctccttcc cgagggacag 180
 aatctttacc agnntnggaa agacctccct aactc 215

<210> 265
 <211> 287
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)..(287)
 <223> n = A,T,C or G

<400> 265
 gctcgcatc aactgtgatg agcccatgta tgtcaagctg gnggnggcac tttntgctga 60
 gcaccngatc aacctgatac aagggtgatg acagacannt aaactaccgt gaatgggnag 120
 gcctctgtac antctnatcg angagggcnn accacaggca angtggttgn ttgcnngtng 180
 ccntanttg ttaangacta tggcanngan tttcaggcca nggatgtcat acgaggaata 240
 ctncaagtgc nggaaataaa taaatttttg gctgaaaaag agaaaaa 287

<210> 266
 <211> 170
 <212> DNA
 <213> Mus musculus

<400> 266
 gactgagttc ctgctgagc agtgctggat ggcggcttca tctacttgat catgctgcgg 60
 cgcttcaagc agaaagccca cctgacttac aatggcaaca gtggcaacag ctcagaacct 120
 ggagagacac cgaccttga gctgggtgac cagacttcca aaaaaaaaaa 170

<210> 267
 <211> 258
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)..(258)
 <223> n = A,T,C or G

<400> 267
 gactgagacg ttcctctgct ggagactggt gagcttcagg gacatgccat caaggaacta 60
 aagggagcat taagagacta tgaaatgaan gggcttgtnc ctacaggcat gaccgnaaac 120
 tcctgctgna nnaggccaga gactttcgtg gtnttgtgaa aggaaactaa ntttaatnaa 180
 atnttgagnc gnnctnnctt cttgnaacat cctgattagc ggcttgatcc tactggcaat 240
 accggaaact cctgctga 258

<210> 268
 <211> 337
 <212> DNA
 <213> Mus musculus

<400> 268
 aactgaggca aacctgtacc tgggactgct ggtcatgtgt ggctttgtcc tctttgatac 60
 tcagctcatt attgagaagg ctgaacacgg agataaggat tacatctggc actgcgttga 120
 cctcttccta gatttcgtta ccctcttcag gaagctcatg ttgatcctgg ccttcaatga 180
 gaaggacaag aagaaagaaa agaagtgacc aactggccgt cagcctttcc cagctcacct 240
 tctccccccc accccccccac ccctgtttct ttgcacacat cacagggtgtc gtgttctatg 300
 ataataaag catcaggaaa gcttttgtac ttaaaaag 337

<210> 269
 <211> 150
 <212> DNA
 <213> Mus musculus

<220>

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<221> misc_feature
<222> (1)...(150)
<223> n = A,T,C or G

<400> 269
ggagaacttt ctacatttag agctgtgcaa cagagaggag caggctgtac tcctgagagg      60
tagtgagctg ataanaagat tccagacctg tggaaacctg gatgtgaata gtatgatggc      120
agaaattttt gattaaaaag tcattgtata                                     150

<210> 270
<211> 119
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(119)
<223> n = A,T,C or G

<400> 270
cacctttgaa ccctacggct gntttgnaca tnttntgnat actaggtntg cccnctganc      60
ttgggcctcc tctttttctc ttaagtcttg ctttctttcc ttncctctgcg aaatgagtt      119

<210> 271
<211> 525
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(525)
<223> n = A,T,C or G

<400> 271
tgagatttga aggatgcacc ntctggccaa ggacagcctt cttttcggaa gactcccgat      60
tcaaagtggc gacagacggc accatcacag tgaagcggca tctaaagctc cacaagctgg      120
agaccagttt cctcgctcgc gcccgggact ccagtcatag ggagctgtct accaaagtga      180
cgctgaagtc catggggcac caccatcacc ggcaccatca accgctgacc ccctctccaa      240
catgggtctg accttcagtg ccaaagaaga tgcaattgcc ttgacagaaa aaaaacggat      300
ggagctatga tgtggaagag aagaaggttc cgaaacccaa gtccaagtct tatggtgcaa      360
acttttcttg gaacaaaaga acaagagtgt ctacaaaata ggttggagct ggctacatct      420
ctgcttgact gtgactgaag tgtcagctgt gcactattta tagtccatgg ataatgcacc      480
tcttaatctc ctaataaatg tgacctttaa actacaaaaa aaaaaa                    525

<210> 272
<211> 278
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(278)
<223> n = A,T,C or G

<400> 272
aagacagcag acccttgaag gacatgtcat tgcaccttta cgctctgnga tgaccngnca      60
tactntccct tgccctgntt ttcgagtcgn tggaaaccna gnnaganaan tctatncngg      120
agnaagagga taatgcanc cccacgggtg agtgctatnn atagattnta catcatanng      180
aaatatacta ctgcatagct acgacgttac ctanagcata cccatgacca ttaacacctg      240
ttnatgngga cactccagng ntattatcaa ctgccatt                                278

<210> 273
<211> 297

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<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(297)
<223> n = A,T,C or G

<400> 273
gaactgaggc cctttgattg aatttaaaca gtctnctaga ttgattctgc ctcccaacaa 60
gaacaaactg aggaagtgat gagccacgta gccgntnacc cttanagtnt tagatgnngen 120
gatcccttca tgtatacttt acagaaaacc agttaaccgg ggccgtggng gccncncncc 180
nttttgnccc acccnnntgg aggcaaaggc aagccggntt ntttcaaagg gggggggccc 240
ctggttccac aaagggggtt cccaggaaac cccccggggn tttaaaaaaa aaccctt 297

<210> 274
<211> 139
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(139)
<223> n = A,T,C or G

<400> 274
acaacttaat cacatgtncg cccgccnctc accaaacctg nattgatttt nangntggag 60
caagaggaag agccttgntg tggagnngag aganntgctg aggagaccct gnccagctcn 120
tgcttactga cctgcttga 139

<210> 275
<211> 385
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(385)
<223> n = A,T,C or G

<400> 275
actgaggtgg gagagcacac ctgtacacct gggcacctgg gctcctggac acctggacac 60
ctggacacct ggacacctgg acacctggac acctggacac ctatacaaac tccatacata 120
cacatatacc acagacagat gtgcaaaggg ttatgcacag tgacctggtt agttttaact 180
gtcaacttga cacagcctag agtcaactgg agagttgcct agctttnnca gagngactca 240
cngatgtctg gctngntatt caagtctcat gacacattaa ggagctttca aacagctgta 300
gncgtgnacc taangaantg gtgggnaatg ctgannagct gaagtaattg aatcagagta 360
nnnatattta tcccttgag actcc 385

<210> 276
<211> 288
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(288)
<223> n = A,T,C or G

<400> 276
acaatggatc acgttagaca acatgaatga ncaaaaaatg aatgaacaaa tgaagaaaac 60
ggcaaagaca agtggccaga aagggccggg cggaagagcc ctcgacagac tgaccctaaa 120
gcaagacgag gcaaggccag tccagaatac cagagtggaa gctccccgtg tancatacac 180

catgcgggat	gaaagtgaga	ttagccccga	gactgaggaa	gatggnttcc	ctgacggata	240
cctagagtgc	atcatacgag	ttaaattgtga	atagttacaa	aaaaaaaa		288

<210> 277
 <211> 180
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(180)
 <223> n = A,T,C or G

<400> 277						
gctgggacca	gtgccaggca	tgccctcaac	tccagcccag	acctggcaga	ccacattcgc	60
tccatacatg	tcgatgggtca	gcgtggaggg	gttgggttttg	ccattctttt	tcactctttg	120
nttggttggt	tgattgnatt	atttataatt	gcaaatagga	ttttttttct	tcatgagaaa	180

<210> 278
 <211> 277
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(277)
 <223> n = A,T,C or G

<400> 278						
ggcaaaggcc	aagccgaggg	aggagtggac	ttcactcacc	cacaggcaca	gccaggcatg	60
atgatctgga	tgcccngtga	agangtgcac	gctctnnggt	ctttanctgg	tggggggaagc	120
cagggtcagc	gtntgccctt	nttctnacac	cccttncccc	accctagnnt	gacacgncac	180
caaagcttaa	taccctnctt	tacananggc	acatnccggg	gtngtacttt	gggtngcntt	240
gaacaggagc	caanatnngg	ntcaaaaaag	cttggtat			277

<210> 279
 <211> 483
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(483)
 <223> n = A,T,C or G

<400> 279						
ggagagacat	gtggacacgt	agcccctatg	gcttctgcct	gccagatcct	ccgctggggcc	60
cttgccctgg	ggctgggcct	cacattcaag	gtcacgcatg	ccttcagatc	tcaagatgag	120
ctcctgtcca	gtttggagag	ctatgagatt	gccttnccaa	ctngagtggg	ccacaacggg	180
gcaatgctgg	ccttctctcc	acctgccttc	cggaggcagn	gtcggngtgc	aggggctaca	240
actgagtccc	gnctattteta	caaggtggcc	gcacccaagc	actcacttcc	tgctgaacct	300
gaccccgcan	ccccccgtct	cctggcaggg	cacgtctcgg	gaggaatact	gggacacggg	360
aaggccctgg	ttggcagaag	gctgcccggg	cccactgnct	atacgtggc	caccttgacg	420
ggccaggctg	ggaagctccc	atgtggccgn	cnagcancct	gtggggggcc	tggtgagctg	480
aag						483

<210> 280
 <211> 241
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature

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<222> (1)...(241)
<223> n = A,T,C or G

<400> 280
tgccccaccag taatggaact caccnaagna tacagncngt cctctcttgn tcatggccan      60
gnngcaagan ccaaggncaa gcctgcatgn canatgccgg tgttgcnnaa accnancngt      120
gcctngagga ntgtcctacg ngcatnangc tgagagcaaa gagaaccgaa agggactggc      180
catgcacccc ggggtcgtca aaacaattan gagagggcga taaatccttg aaaaaaaaaa      240
a                                                                                   241

<210> 281
<211> 425
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(425)
<223> n = A,T,C or G

<400> 281
tgagagagca ttaactatgc cccccagctc ctcgggggcca ccctggaggg gagactcaca      60
caatctacct tcacgctgga gcaacccctg ggccaattca agaacgtcaa cctctctgac      120
ccagatccca tctggctggt ggtggctcac agtaacgagt gaaattcctg gcgatgagtg      180
ccgagggacc cgtggctgag acactgtggt ccgaggagat ctacctgcag caagcccaga      240
cattccgaga agctccaggg tcccagggna agggcactgn ggncatnatt gccttcttgt      300
caatcctact gggcattctg cttgnggnncn ttctcgtact ggtcatattc cgcttgcattg      360
annaactnnn nggnttcagn ccacaaggan caagggggggg atgctgcact attatccgcc      420
ccaca                                                                                   425

<210> 282
<211> 267
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(267)
<223> n = A,T,C or G

<400> 282
actgagatgc cttattggag gaattggaac gctgcacctt tcaggacagt gaggnatatt      60
caaatccagt ttcttgtcan nggntnnngn aatccacaga ggagagcaag attccccaaa      120
ctccaaagac cttgtcatcg cagggttaaca caagtccctt gaaggtnaca tttgaactat      180
tgtagtgtng nagacaatca agngngacaa catttctaaa aattgnattc cacataggnn      240
tatattttgn aaattataaa aaaaaaa                                                                                   267

<210> 283
<211> 328
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(328)
<223> n = A,T,C or G

<400> 283
tgacagtaag gaacccgaga ctccatagaa nagcccaccg caggctntan atcctgcagt      60
cagaggaaga aggtgggact gagtcccctg gaactgagtc gctcanagtg gggccttcag      120
tanggnctcc tatagtcagg agaggggcct gannatggtc cagncagcac antanntgan      180
gctgccactt taccctggng aactgacccc cctcctagcg cccacttcc ggatcccccg      240
ggctggcgag atattgaacc aganccccta aagtcagagc cacctactaa ggtcggagggn      300

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agccattcaa agtaggatgc caaccctg

328

<210> 284

<211> 274

<212> DNA

<213> Mus musculus

<400> 284

tgaagccctg	acaagcatgg	aacttacctt	ggatatggag	ctggtatatc	tcaaggagaa	60
cttgccatga	ccctcctgcc	tctgccttct	gagtacacaa	atgacgatgg	tctcgcttca	120
cgacacccag	tcagctttct	ctgccagaag	cattcggacc	aggaggagtg	ggttattttc	180
ccaggagatg	ttgcattcct	gattgaacat	gctggccttg	agataagggc	ggccccgaga	240
taacagtttt	taaaaaattc	ataaaaagga	tgga			274

<210> 285

<211> 297

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(297)

<223> n = A,T,C or G

<400> 285

cagcgggtcaa	gatgtcgctn	cntcatccgc	acagganctt	nccggacnng	acgggactac	60
acatgccgtc	cacctgggtc	cctgtccgtc	gttcacanat	acnttcccca	cngangagca	120
cacacngtag	acngcnggac	ngcntgtggt	cannntgtct	gtcggcgctc	cnacgggaacg	180
ggattggaag	gacggactcc	acaaggtgcg	ctgtgtcacc	gaggccgcca	ggatggagnc	240
actctnacga	ttctcaacag	gggctagacc	gcggtacaga	aattgtcctc	ctcaata	297

<210> 286

<211> 449

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(449)

<223> n = A,T,C or G

<400> 286

tgaggcaggt	gcagtgaagg	actatattaa	gatgctgctt	cagaacgact	cccttaaatt	60
tctggtcttt	ggcaccatt	taagtatgct	ccaggcttgc	acagaagcag	tcatcgaaag	120
caagtctcgt	tacatcagga	tagatggaag	ngttccatct	tcagaaagaa	ttcatctggt	180
taatcaattt	cagaaggacc	ccgatactcg	tgtggctatc	ctgagcattc	aggctgctgg	240
ccagggttta	acgtttactg	ctgcgagtca	cgttgtcttt	gctgagttgt	actgggaccc	300
tggaacatata	aaacaagcag	aagaccgagc	tcaccgaatc	ggacagngca	gttctgngaa	360
tattcactac	cttattgcaa	atgggnactct	ggacagccta	atgnngggcaa	tgctgaatcg	420
aaaggctcag	gncacagga	gcacactga				449

<210> 287

<211> 337

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(337)

<223> n = A,T,C or G

<400> 287

ggaccacatg	gcattctgtg	ttcgaagtga	ggagatgtgt	ttatcccaag	tgtttctcca	60
------------	------------	------------	------------	------------	------------	----

ggtggaggct	gcgtattgct	gtgtagctga	gctgggagag	cttggcttgg	ttcagttcaa	120
agatctaaat	gcaaatgtga	acagcttcca	gaggaagttt	gtgaatgaag	tccgaagggtg	180
tgagtcactg	gagagaatcc	tgcgttttct	ggaagatgag	atgcngaacg	agatttttaat	240
ccaagtgcct	gagaaggatg	ctgaagaccc	ctctccctcg	ggaaatggat	caccctggag	300
acgactctag	agaagtttgc	aaggagagcc	tgcagga			337

<210> 288
 <211> 180
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(180)
 <223> n = A,T,C or G

<400> 288						
ccccagactg	aaggactgtg	agcnngagag	ccacatcatc	tggaactacc	agggtacat	60
agcggccctc	tanancgcag	gaagctctca	ngagttcaaa	gacaggctgt	gctacntngg	120
aggatctgag	atgactgggc	ttcttgagac	tttggcttta	aaataaatta	gtagttactt	180

<210> 289
 <211> 166
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(166)
 <223> n = A,T,C or G

<400> 289						
tacagtgtgg	gccaaacact	aatatgcata	aatngangtn	nattatgngg	ntgggtctggg	60
catcaggttt	ancnttcata	aggagcccca	ggctcnacct	aaccactncc	ttataccttc	120
cctcttccag	gaaataaaact	tcattttctta	atgtcaaaaa	aaaaaa		166

<210> 290
 <211> 162
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(162)
 <223> n = A,T,C or G

<400> 290						
gaagtaccgt	gtagctgaag	atgaccttga	acttctaata	ctggctctgc	tccccatttc	60
tgggattata	ggcttgggcc	actacattcc	attaagagag	naggggattg	aacctactac	120
tnnagannnn	ctnnaanntt	ctttgaagac	aggggctctc	tg		162

<210> 291
 <211> 196
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(196)
 <223> n = A,T,C or G

<400> 291						
tctgggtgta	ttttatataa	ccaaacatgt	catggctcctt	cacagcatac	aaatagtttt	60

gacgttttaa	ataaaagtat	ccagcaaaga	caaaggactc	ncannncnct	acgctgggtgc	120
nngantctcc	acctgggtca	aagtgaccac	gcctgnctnt	ttnatcgngn	gtgctctgca	180
cttcttcccc	accccc					196

<210> 292
 <211> 131
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(131)
 <223> n = A,T,C or G

<400> 292						60
tatacccacg	tgagtacctg	aagnggaagg	aagntaagcn	cncntgccct	gagcnagatg	120
ntngaganta	tgaccnacaa	ccgnaacgtg	atcactggag	cccatttacc	cctgngggcca	131
gtccacatgg	t					

<210> 293
 <211> 367
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(367)
 <223> n = A,T,C or G

<400> 293						60
agagctcccc	cgccagaaga	catgaanaan	catancgact	cgggttaagg	aaagcgccga	120
gatgatgggc	tttctgctgc	cgcccgcaag	canagggact	cggagatcat	gcagcagaan	180
cagaaaaagg	caaacnagaa	gaaggaggaa	cccaagtagc	cttgtggctt	cgtgtccaac	240
cctcttgccc	tccggctgtg	tgccctgnagc	cagtcccacc	atgctcgagt	ttcttcctgt	300
agtgtcaca	gggtcccagca	ccgatggcat	tccctttgcc	ctgagtctgc	agcgggttcc	360
ttttgtgctt	ccttcccctc	aggtagcctc	tctccctctg	ggccactcct	gggggggtgag	367
ggggggtt						

<210> 294
 <211> 422
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(422)
 <223> n = A,T,C or G

<400> 294						60
gactgagaac	agatacaact	tcctggttcc	cctcctgtaa	aatcgtggct	gttgaatggc	120
ttagagtcc	gaagatgtgc	gagcacacga	taccacacca	ggccaccagt	tctgttccta	180
ggagtgtgga	tggtacctaa	tcctttcaca	gccttctggc	tgacattttc	tacacagtga	240
atgggagtgtg	cttttttttt	ccatgctgct	ttttctacgt	ctgagtttct	tggacacttt	300
ccagctgcac	accaaaacag	cttccttggt	tgtctanacc	gtcggtaatt	gactcaagcc	360
gtcccccttg	gaagccatgc	accggacttt	ccttgcatgt	cgtataanag	tgcttgcgta	420
gattcctaga	agtggatgaa	ccagccaagc	agctatgtnc	ctggngcgat	gttgatagct	422
gt						

<210> 295
 <211> 105
 <212> DNA
 <213> Mus musculus

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<220>
<221> misc_feature
<222> (1)...(105)
<223> n = A,T,C or G

<400> 295
attttcctga aagtaatatc ntcncagaga agcttccttg gnacctgang tacacctncc      60
tgcatgannt ccccnagnacc agcagttata accaggacta tactg                          105

<210> 296
<211> 178
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(178)
<223> n = A,T,C or G

<400> 296
cctgggacat gttttctgga agagcnatcn aacgantgga acaaagaatg atnaccgtnt      60
gctgcaggct gtggaaaacg nagangcatg anaangngac ctcactgctg nacaanaaag      120
ggtccagccg ccacgaagca tgacaccgag ggcattnnacc agcgtaggag agaatttt      178

<210> 297
<211> 114
<212> DNA
<213> Mus musculus

<400> 297
actgagaggc agatctgaca aattctggca gttctccctc tgaggatgat gccctgcctt      60
caggttctcc ctggagaaaag aagctcagaa agaagtgtga gaaagaagaa aaaa          114

<210> 298
<211> 274
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(274)
<223> n = A,T,C or G

<400> 298
cgtgggaagg tttcccagcc gagnccaggg acctgcaagc ctgtctactt gtcctctggag      60
ctggaggaca aggaacagca ccagggtgtc cagcccgtgg acggncaggg aagtctcgtg      120
agcagcctgg ccgttggtgc cctctattgt ganggaggag agcancgagg aggttnttgc      180
catagctgct acttgtgcta aagaactcgg acatgancct gtccctgctg atcttggggag      240
aagtgcgcac cccagagccc ccagaatctc tcaa                                274

<210> 299
<211> 244
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(244)
<223> n = A,T,C or G

<400> 299
gatccagagg atgataaaga aatgatagca gctccagana taccaactga ttttaactcta      60
ctgcaggagt cagagacaca cttttcttct gacacagatt ttgaanacat ntgaaggana      120

```

aaatcanata ncaaggcaca ggcaaaactt tnttttttaa ggcnnggggg ggtccagcag	180
aaaagggtna aagaggaaat ggtaggagga aaacctcctt ctnggctcac acccgaatga	240
acgg	244

<210> 300
 <211> 130
 <212> DNA
 <213> Mus musculus

<400> 300	
agaggcaaag aatgttgctc ctacaaagga actctcctga cagaagtcca cagaggacag	60
atggatgggg atgatttcca cactagtcc taacttttaa taaaaccaag cctgcagccg	120
tgtaataata	130

<210> 301
 <211> 122
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(122)
 <223> n = A,T,C or G

<400> 301	
catactaaca gaggctgggg gggattntgt ottggntntc attangacca nngcgnccct	60
attgatctnt tcatggngga aattgtggag atgaggcaca agtcngaaac ggacacacag	120
gc	122

<210> 302
 <211> 131
 <212> DNA
 <213> Mus musculus

<400> 302	
gtgtcgtcaa caggaaagtg ttgtctcaga agaggagcta agatgggaag tatgggctag	60
gacgggaagt gcaggtctac tacaggacca ggtgaaaaat aaagtcactg aaacaattca	120
aagaaaaaaa a	131

<210> 303
 <211> 164
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(164)
 <223> n = A,T,C or G

<400> 303	
gatgtaccct gctaccacca gggccttgct tcccgtgtag ttgccaaaag aaaaatttnc	60
gctgccccat cctccttgct gagaagnctt cctcctttgc tngggcattt ccgctgcccc	120
attgctcctg ttgaaaagga cttnccttt tgcttgggca tta	164

<210> 304
 <211> 536
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(536)
 <223> n = A,T,C or G

<400> 304
gaactgaggt tcttcaggag atgtagctga aacggttggt gaccaatcag tcctgtgtga 60
gntctgatnt atanggncca tgtgcagcnn ctacaggncn cgggnaacac ntantgacac 120
tganctttnc agcacgngng agaggngctgc nttcntggnc ncntcntatn ccnancctc 180
nttccaagag cgcacctnac aatcctgcna ccagtccttc nggtggcanng tctganagca 240
tgcacaggtc aatgacttct tgcagacaca ggaaatccac gcactcaant ccagctngag 300
atgttnctcg gagctnttca nagtcggnac tgcaacacaa aggagcangc aggcctnctc 360
cagactncta tntaggattt gcccaggaag taagcatcng tcagactctg nacattcctg 420
ntagangtnc catgtacttg gcagcattcg agtnttcta cgttnaaaga gaaattcttt 480
aanaagaatt tccagaagct gggcgtggng gacacgcctt taatcccagc actcgg 536

<210> 305
<211> 324
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(324)
<223> n = A,T,C or G

<400> 305
actgagtgc accaggggcaa aggccataan ctccttncat gctgncttcc tgatacacia 60
agcatcacia acctctcgan ttacctctgc caccgcgcaa ctccacgagc cctcttctg 120
tcccctgaat gccatgcttg ccagcaaccc ctgggttcaca tcngngactt aagggatccg 180
atgaagatat gtggaccagg atgctctgtc tttgagcagc ctactctaata ttcttttttg 240
atgctccctt ttagttcctc gaactaagct gcttctttgc taagtacaca tctgctaaat 300
aaacttcagc ttaaaaaagaa aaaa 324

<210> 306
<211> 164
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(164)
<223> n = A,T,C or G

<400> 306
gccacctggc ttctcttttct agaggaccna ggttctatnc ccagtnntga cattggaagn 60
tcanangagn agtgntnctn cgtncataat ctgaagtnct ctctgacctc tttgggnact 120
gcacacacat ggncaaaaaca cctagatgca taaaataaaa ataa 164

<210> 307
<211> 481
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(481)
<223> n = A,T,C or G

<400> 307
tgagaattta agaagctttt attcatgtgc atgtcataga agatgaattc atcctcttct 60
actatgaatg aagaacctga tgctctatca gtagttaacc agctacggga tttagcagca 120
gatccactaa atagaagagc catcgtccag gatcagggat gtttgcttg ccttatttta 180
tttatggacc atccaaaaccc tcctgtcgnt cactcagctt tgcttgcgct acgctacttg 240
gctgaatgcc gtgcgaatag agaaaagatg aaggggagagc tggggatgat gctgagcttg 300
cagaatgtca tccagaagac tacaactcca ggagaaacaa aacttctggc ctcagaaatc 360
tatgacatcc ttcaatcctc caatttggtt gatgggtgata gttttaatga aatgaatttc 420
gcgtagaagg aaagctcagt tttttttttg gaactacaaa caaacgggac aaaacagtag 480

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<210> 308
<211> 356
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(356)
<223> n = A,T,C or G
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<400>	308						
tcttgtggaa	ctcttaaagg	ctcgtgcagn	anagcatggc	ntggtncnt	atngganttc		60
tttacnatgt	cngtgcctg	ttgatccacc	tgaaggagta	tggccaccag	gttcctgaaa		120
gggggaaaga	tgaatgggt	caatctacct	gagggttaaa	acgtcacttc	ttgatggaac		180
agaggataca	acaccagggc	nnnatgtncn	ctncttgna	agttncctgac	tcnctggacn		240
gcgacgtcgg	nnatgacncac	atagatagat	tnctgctcng	ntnnacgncc	ttgactgnct		300
aacncccgcc	tgaattata	ttatcacaa	gaggnacctc	tacctcaaag	actata		356

```
<210> 309
<211> 188
<212> DNA
<213> Mus musculus
```

```
<220>  
<221> misc_feature  
<222> (1)...(188)  
<223> n = A,T,C or G
```

<400>	309						
acttgaacat	acccaagatc	tctttctact	cattgcaact	tctgaatoga	tcttctggtc		60
taagaaaaag	gatcaagatt	ctgtgatnng	aggagctgaa	naacgttata	annctacatg		120
tgncgtgtgt	tttctgtttt	cttgnaaggt	acaattaatt	tcttctctgg	ttttctatt		180
ataaaac							188

```
<210> 310
<211> 266
<212> DNA
<213> Mus musculus
```

```
<220>  
<221> misc_feature  
<222> (1)...(266)  
<223> n = A,T,C or G
```

<400>	310						
caaagcatgg	gtttgccaga	tgtgcaccac	aaaggctgtg	gaggggtttg	aagcatgagg		60
ttggcatgat	agcgacctga	cagtgggaac	ctancatgct	gaatggagac	ngtttcagga		120
gctccaggcc	ananagacnc	cacnagatga	aataggctcng	gncttttacc	ntcagtgcat		180
gntnagncag	gcacaancgc	nggagcgagc	cggctctatt	ttttagatac	ttncttcaat		240
agagacccct	gccttaaaaa	aaaaaa					266

```
<210> 311
<211> 179
<212> DNA
<213> Mus musculus
```

```
<220>
<221> misc_feature
<222> (1)...(179)
<223> n = A,T,C or G
```

<400> 311
 gtgggttggtg acactcaaga agcctaccag agagngcctg ggtatgaacc ttgatggtat 60
 caaagagcct gggtcnggtg gtananagcg gctgncncaa gngaggctcg agcatctcca 120
 agnnactatt ggaggncaact gtaccacact ggctttgaac aaacggctgc cgggggaag 179

 <210> 312
 <211> 129
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(129)
 <223> n = A,T,C or G

 <400> 312
 ttaacctgat gatggangag atgatcttna ccttgctgac acacaccngt ancttnantg 60
 acctgnagga ctgtgaccaa ntccacgtgn atgatgtctc atccngatga caatggctcag 120
 gatttaagc 129

 <210> 313
 <211> 263
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(263)
 <223> n = A,T,C or G

 <400> 313
 tctctatctc cgccgtggtg atgtcctatc tgcagaatcc tcagcccatg acggcctccc 60
 tggatgatgcc acctaggagg gttggatcct ggactcaggc ccaccttctc tctggcctag 120
 cctttggctg cctccgccct ccctcagctg ctgtcctaaa ctttctctgag tgtgggtctct 180
 gggctcccan ctgaatggaa ggaagntggc cctttctttg gggccctgct tctgctttga 240
 caaagagata aacctgcaga ctt 263

 <210> 314
 <211> 436
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(436)
 <223> n = A,T,C or G

 <400> 314
 catgtgatga gccagaagct atcnnatga ggaagatagg cctatcatca tggaaggagc 60
 caaccagcca gagacggaga gcagaagcca gtaggggctg agcatgaaga ttcagttcct 120
 ggacactaag actgttggtta tatccagctc agacctgcga gccacaggcc tggcctccag 180
 tattatgatg gagtacttgg gccttacctg gnccagccct tggttctggg ttctgcagac 240
 tgctgtttga cctctggctt tgagacatgc ccaaagaagg gctggctggt cttcatggcg 300
 tgctaagcca gtgcctcaga actcaggagg ccagcctggg gtccanaaga tgaccacctt 360
 accttaggac agccacttgg actcagcttg tggagggggg tcttgctggg ctggagtntc 420
 gtgcctgggg ggggtct 436

 <210> 315
 <211> 196
 <212> DNA
 <213> Mus musculus

 <220>

<221> misc_feature
 <222> (1)...(196)
 <223> n = A,T,C or G

<400> 315
 aagacaagag gagagatgga gaagtgccat gactcagggg agaaggatgg gacgtaggag 60
 cttcaggagg gaaagccaac cagccatgtg agaattcggg tagctcctgc aagggcacac 120
 tgtgcagtgc atctggctga gaaccaaagc gatgtanccc aaattaccag tacaagcttc 180
 tgagatcctg gaaaaa 196

<210> 316
 <211> 237
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(237)
 <223> n = A,T,C or G

<400> 316
 ctgtgaaagt gatgacnatg acagaacgtg ncaagcnagc tctagtgact ggactccgcg 60
 gccgcggata ggtccatata cttttgttca gcaacatctc atgattggca cccatcctcg 120
 aacaattctt aaagatttat taccagaaac aattcctcca cctgagctgg atgatatgac 180
 gctgggggag attgttatta atatcctttc agaaccacca aagcggaaaa aaaaaa 237

<210> 317
 <211> 142
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(142)
 <223> n = A,T,C or G

<400> 317
 atacatgaga aaacanggae gagaaaagag atgcactaac ctttgaatat accaacadat 60
 tggcagagat caaaggaagt taacagtgtg tacccaaaga accatgccgt tttaatatgaac 120
 aanactgcct atgaataaaa aa 142

<210> 318
 <211> 104
 <212> DNA
 <213> Mus musculus

<400> 318
 tgaggctttg tcacctctg cagacctcat ccgccagcga gagatgaaat ggggtggaaat 60
 gaattattca attaaaaagt ttactttaga ccacaaaaaa aaaa 104

<210> 319
 <211> 125
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(125)
 <223> n = A,T,C or G

<400> 319
 agttgtgggc acgtgcctct tccagtttga cagcaagtgt cttttacctt ctcagccacc 60
 tgagaacca gaagagttgg ttttcaaagc tgagctctga ctaataatna aactagaaac 120

aacaa

125

<210> 320
<211> 231
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(231)
<223> n = A,T,C or G

<400> 320
gtactctgag ccctgatcan naaagagctt tctgaaagac ctatagngca tggctgcbng 60
gtgtncacag ggtttccctg tgtattctat nccttggana ntggagantg acnctcactg 120
cctgtggacg gatcatgtnc tnggggcnct ctgaggacta nnagnanccn tcactttgct 180
ngnctgccac nggaattcag ngttgtggca natggagatc ccttggggcc c 231

<210> 321
<211> 266
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(266)
<223> n = A,T,C or G

<400> 321
gactgagttc cggactccgg ggttctgatg ggctgctctg aactccgtnt gaccaggctc 60
acacatcana gatatgcagg canaaggatg tatagangga ggaggaggag gaagaggagg 120
aaatgnntng tctgnaccnc ttnatctcan taccctatct cngccnttcc tatttntnct 180
acntagtant ncttctcnt cgcctgtgg tncctgcgctc ttcattcttg ctttccctgng 240
ctgntatggt gctcactctg agaaca 266

<210> 322
<211> 122
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(122)
<223> n = A,T,C or G

<400> 322
cttctcaagc tctagatgac tcatctanct ngacacatgc nggcctcatt cgggtaagaa 60
gccatttnaa tctcgatcnn gtgcanttat gtggcctcta atnancgtga ggtgaccacg 120
ac 122

<210> 323
<211> 238
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(238)
<223> n = A,T,C or G

<400> 323
tcgcagggtga agccttctgg aacgcgtaca cagcaggncg tgagggcngt gcatncangn 60
taccacactc tncggncntnt angnctcat agggctcaga caaggctcct gcananaaca 120

caggccangc cncnctgnat ctggctgccc tttcactngt tgnatgcgga agccggctgc 180
cncantcctt ctcccacagt acagnagnac tcncngccac agtcacggtt tcgggcgc 238

<210> 324
<211> 110
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(110)
<223> n = A,T,C or G

<400> 324
gtcaatgcgt gttcctgaac aagaagatgt ccactgtccc ncaggaaagc caggatgggc 60
aagaggaaga agtcactggt gaagatgttg gacagagaga gtcagacgat 110

<210> 325
<211> 181
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(181)
<223> n = A,T,C or G

<400> 325
ccgagggtgt tcgtgttgat ttacagttat ggagatttga ctgaccatat ngagaccna 60
aaatgggaaa atattgttta gaatgaacat ggaactgttc atggaacaaa aatgaaagat 120
gtcaataccc gngaaaagga taaacatgta gtaaagnagag gatatcatga aaaaataaaa 180
a 181

<210> 326
<211> 174
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(174)
<223> n = A,T,C or G

<400> 326
tgctctatag aaccttttcta aacagggtcca ctacccctt ctgcatccct tcttgtatcc 60
tttctctcct actacctctg gtgagtagta gggctaagg gaaagttaa gcttttaaga 120
accatcaggg gngngctttc atgaggaaaa tacctaatat taaaacagaa aaaa 174

<210> 327
<211> 179
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(179)
<223> n = A,T,C or G

<400> 327
acctggcctc atacaaaccc tgnagatggg ttnttnaccc gagangtttg tngatttcan 60
ccaatgatgn tcatggggaa atgaacatan acagacctna tnttctaaca gaagcccagt 120
gnancacacc cttgatagng tnctgaacat gactgcagat ggttctgata aaaaaaaaa 179

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<210> 328
<211> 343
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(343)
<223> n = A,T,C or G

<400> 328
gactgagagc cgcacatcggtc gtcttgtgga agagtcgggc acggtcacat ctgggagcag      60
cactgtcggt cctgtctcgn atgtgtctcct gtgtcacatg tcacctgtca tcttcagaac      120
ctggaagtta tgacttcgag aagccaaggc ctgttcagnc cacatggnan ccctaaagan      180
agcggananaa ctgactgcac tgnacngngn ngggcttggc cgaggatgcn ctagctttca      240
ttcgnecgtg anaccgcan agttgnatta gcttctngca aagctcaaga actgtacacc      300
accaccctag ngcatgcang aggcccttgc tatatgcaga ata                          343

<210> 329
<211> 107
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(107)
<223> n = A,T,C or G

<400> 329
agaatcttct cagggtccnt ctggactntt cggccnaagg atggactatg gnnnaagatg      60
ccggaccctg atttcacagn cctgagacgt naaactcctg gtgggga                      107

<210> 330
<211> 255
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(255)
<223> n = A,T,C or G

<400> 330
agaagtcctt tttacccaat actttangtc tgtctaccaa atcatcacag gtaagaatgt      60
gtcataatga aagccactat tttgcataca taaagaagaa nccacaaggc agaactgnag      120
nnangactct gtggctnaag gggcttgccc ctgagcctat gatctgagtt tagtccctgg      180
gacttgaaca gtggnaaaga attgnttcta tcaagttgtc ctttgacctc tacacgtgca      240
cagtggcaca tgcac                          255

<210> 331
<211> 459
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(459)
<223> n = A,T,C or G

<400> 331
ctccacacag agactgaang ccaggctgcg gtggatggac cangatgctg nggnttgacc      60
anactgctgc ggatggacca ngctgctgcg nntggaccag gctgctgcgg ttggaccagg      120
ctgctgcggg tggaccaggc tgctgcgggt ggaccaggct gctgcgggtg ggcctcgctg      180

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cagttgctgc	ggatggatct	gatgcctgtt	aagcatcact	tctccagtgt	gagcccgcc	240
cctccatttc	cgtcacgtgt	gccatcttt	ttcagtcata	tgaactccaa	ccatcagcgc	300
aacttaagtt	cggctgtctg	ttcgtgcatg	cttaatatata	aaaatgtact	aacagtgtgg	360
ctgagaaatc	aaattatgca	cataaatatg	ctggcatagc	anaggcggcg	gcagaagctg	420
aacttagcag	agctgacgcc	agttcacatt	tgcaaatcg			459

<210> 332
 <211> 106
 <212> DNA
 <213> Mus musculus

<400> 332	
gaagtaccgt	gtagctgaag
atgaccttga	acttctaata
ctggctctgc	tccccatttc
tgaggattata	ggcttgggcc
actacattcc	atttgtgagt
tgggga	
	60
	106

<210> 333
 <211> 213
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(213)
 <223> n = A,T,C or G

<400> 333	
aaagcgtcgt	ctaaaagaac
caaataaaca	aatagaaaag
atgccagggt	agcctcagtg
gttaagccac	ctaacttcac
aatacccagt	atccacatgg
ttaaaagaga	agattgacat
ctgagagctg	tcctctggcc
tccatgggtga	tcagtgaagc
gcacgtgagc	catctnccct
ctactngcnt	gtgagngtct
gcccttacac	ttaa
	60
	120
	180
	213

<210> 334
 <211> 464
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(464)
 <223> n = A,T,C or G

<400> 334	
ggccatcccc	ctcaactata
aaaatatatg	aatcggaatt
gcattttccc	tggaacaaac
cctgagcaga	aaccagaatg
ctacacttca	tccagaaagt
ttctggagca	tcttcaaaga
tgctgaagaa	ccctttttaca
gngagacttg	gagctggcag
aatagacata	ctttctctca
agacatgtct	actgnagaac
ttttcctctt	tgccctcaag
aacttggctt	tccccatcat
ttcaagtgtg	tatgaggaag
atacaatgct	atcatgtgtc
accatgcaac	tttaaaaagc
anaaggcagt	ccttctctcca
aagaaacnga	agcaccatca
cttacctact	cgatagccca
aagccagctt	tatatataac
tctggcgggg	ttaatccctt
ttactgctcc	cccacttctc
atggtataata	caaagtctta
tatccccgtc	ctagctttca
ctca	
	60
	120
	180
	240
	300
	360
	420
	464

<210> 335
 <211> 193
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(193)
 <223> n = A,T,C or G

<400> 335	
aaggcatctg	atacacanat
gctctcggtg	tggcgttatc
atcctcggca	ggaanagggc
	60

nctccatgcc	ntgctcctnc	cactgattat	agatctctgc	gatggaatcc	tgaggaattt	120
tcacaaacac	ttctttttgca	ncttcattgt	tcttttaatgc	tatgaaaaaa	attcantata	180
tataaacttc	tgg					193

<210> 336
 <211> 408
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(408)
 <223> n = A,T,C or G

<400> 336						
catggatggg	tagctgagat	aaaggaaaga	caaaggctgg	ggctgnggng	cttgttgccct	60
gacgccctgn	gagctgaact	ctgggactgc	tggttgccat	cccaggaagt	gctgcttatt	120
tgagggtgnc	tggtggaaat	gggtaatctc	cgaggatgtc	tgcagcctgc	ttgttgtag	180
ctgtgactgg	ggaaccccaa	ggcagaggca	ggggtcaggc	agctgagaag	cagcagaaga	240
acacacttag	attcaccttc	tggtctttaca	atagttcaaa	tatagaatcg	aagtgaaatc	300
tcattggatt	atgcctctct	aatgaaaagc	gagctgtttg	actatacgga	aaatgtgctg	360
acattaattg	cttctgttta	ttaaagggtga	tttgcaaatt	aaaaaaaa		408

<210> 337
 <211> 485
 <212> DNA
 <213> Mus musculus

<400> 337						
gagtccttgg	ctccatgccc	caaacgcatt	ctggacgggt	aacctcagag	ctgtgaagtg	60
gatggacatg	gaagcgaagc	atggaggctg	ccatggtcac	tacgtccatg	gcatttgtat	120
ctatggaaac	ggagacttgc	agtggctgat	taattcgcaa	agcctgtttg	ctaacaatt	180
tgaactcaac	acataccctc	ttaccgtgga	atgcctggaa	ctgaggcttc	gagaaagaac	240
actcaaccag	agtgagatcg	ccatacagcc	gagctgggat	ttctgacctg	cagcagctcc	300
ggcctaaatg	gaaattgaag	acgtaaagaa	gagctttctt	ttccaagaga	ctctgggtct	360
ggctatgctg	aagacttttt	taaaaaatgg	ttttcagggg	accgtgagga	tttggaacaa	420
tggtctctgt	tgcaatatcc	actgagcact	gtaatacatt	tgacaggatg	gctgaaaaaa	480
aaaaa						485

<210> 338
 <211> 338
 <212> DNA
 <213> Mus musculus

<400> 338						
gaagagctca	gcacacagac	tcaaaagtac	aaggatgaaa	tgtcacagct	caactgcagg	60
gtccttcagc	tggaaggaga	gccttcttgt	ctccatacac	agaaggaaga	gaaccacggg	120
gctatccagg	tgtaaatgaa	gaagctggag	gaggcagggg	gccgggagga	gcagcagggg	180
gatcaaatcc	aaaacctgaa	aattgaactt	gaacgtgtga	atgaggaatg	ccagtactta	240
agactgtcac	aggcagagct	gacagaaagc	cttgaagaaa	gtcgaagcca	gctctacagt	300
gtccagctga	ggctggaggc	agcacagtcc	cagcatgg			338

<210> 339
 <211> 370
 <212> DNA
 <213> Mus musculus

<400> 339						
tgagatccct	ctccggggat	ttcggtttgg	gacgaaagcc	acagtgactg	ggcagtttca	60
gggatgagca	aagtcagcct	cgagcctgtt	ccatcaaggc	accaagcccg	gcgacaccaa	120
cgctcaggag	gttttttagt	ttcatggctg	ccttgtggat	ttgttctttt	acagtcattt	180
ctttattgag	aaaggggaca	caccaagggt	agaggccact	tgccagagct	gttcttctcc	240
tgccctgtag	gttccaggga	ttgaactcgg	gcgagcaggc	aagtgggatt	taccctccga	300

atagctgtca gcccaaagtt gttatttaat gaaatctgac ccgaggtatt agaaatcgga 360
 aaaaaaaaaa 370

<210> 340
 <211> 233
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(233)
 <223> n = A,T,C or G

<400> 340
 gccttatgag tacgtncna cncacacgcg ctgaacctga atcaccacaa ctcgccctt 60
 ggatgacagc cnaanncttt ngcattntgn ctangattnc ncgangcacg cctgtctaata 120
 agccnagcct gttgatctaa gagagcatnn ntctccnana ctcagctcng naaggagagn 180
 tgggcgaatg gatccaatct gagatagtgc tncgtgctcg catgcatggg aac 233

<210> 341
 <211> 230
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(230)
 <223> n = A,T,C or G

<400> 341
 ataggaaatg aagcgccttg agccacatca tgggtacagcc aaaccacagaa gccaggctgc 60
 gaaggttaaa gccacagagg cagtgaggag cacacgcctc tgggtggacc tcagatgcct 120
 cgcagcgaca gtcacacctac acggtgtgta tttagacagt gccacctntg acttaagtnc 180
 agttttcaca gacccgagat aaggcggggg gggggggggg tccccctgcc 230

<210> 342
 <211> 122
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(122)
 <223> n = A,T,C or G

<400> 342
 aagcctggcc tctccatta cagagagggg gaagatggat atttgggggc cttacgattg 60
 tcatncccta ccagctgtca cttccagacc acccccact ccaaacttgg ctttaaaactt 120
 tt 122

<210> 343
 <211> 274
 <212> DNA
 <213> Mus musculus

<400> 343
 actactttgt ggcccaccct gtccttgaac tcagagattt acctgcctct ccagcactga 60
 gaagattcag gaattctgat accggcttcc ctggctagaa accttttaag agtactgtta 120
 tatttggtac tggggaaatc caccttccat aaccctgctg ggacataact attaagaaga 180
 cgtttgctac tgacttcgtt cttcccttgt tgattgtgct gtgttctttt tttgcaataa 240
 accattcact agtcctccta ggcaaaaaaa aaaa 274

<210> 344

<211> 210
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(210)
 <223> n = A,T,C or G

<400> 344							
gcagttttgt	tctttcaaaa	taagaaccaa	gacccagggc	ttctgcagaa	angaatacag		60
tctgaactgt	ctgtgcaatc	ggtcgtcctg	tcccctggca	aatagtcagt	atgctaccat		120
taaagaagag	aaaggtacgg	gagctacacg	acaatttata	aacggatgtc	cccagcctct		180
gtaaataata	ataataaagc	tgtctaactt					210

<210> 345
 <211> 143
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(143)
 <223> n = A,T,C or G

<400> 345							
ggccaatcca	cgtcttctca	actcctcctc	tgtctctcaca	tcacatccaa	tccaactggc		60
aangngntn	ctgctaccan	ngcagaacag	ncccatccca	tcaccccacc	cacactaaaa		120
gaaagnactt	acagaaatac	caa					143

<210> 346
 <211> 270
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(270)
 <223> n = A,T,C or G

<400> 346							
gagaagcctg	actcctagta	gannctgagn	cttctgcact	atnntccaat	ngtgnacaaa		60
nntgntctnt	ttgnggaaca	naaagaaatc	cgatccctct	gngnagnnga	ttgggaanga		120
atnctgattcc	taaatgagan	gctcgagggt	gaggcacctg	tttctgaact	ctgcggttga		180
gcangganga	cgaggaagtt	ccagcatggc	ctcgggggat	ggtggctaag	ggacagagcc		240
caaagantnc	ttcacagaga	ccacatattt					270

<210> 347
 <211> 467
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(467)
 <223> n = A,T,C or G

<400> 347							
tgagggtctc	tcccanacct	gagtggaggc	anaaccccn	tgggnagttt	tgttgcttgc		60
tgatccactt	ncggtctngg	atgctgtgga	caggctctgat	gaagacaggt	cccgtgtggg		120
ccgggaagac	tcagagggtta	gataggcgan	aagcacgagc	gattacctga	aaaatgctgt		180
gtgcatcatt	atcgcccana	nagtgccttg	gcgtggngnc	ggatcccatt	gtgagtgatg		240
tcttctccgc	tgatgcagtt	ctcatggtct	ttgtncactg	ggacacccaa	naaggcacc		300

tggacagtct	ttcctggcag	caaattgtan	atctgtgcat	tggagganaa	caaagggctg	360
gacctggagg	caagatgcag	aggctaacca	taaaacccgn	gaggcattct	tcgaagcctg	420
tacatgagga	cnccttctctg	gaaacacaaa	ggcatttttaa	aagacat		467

<210> 348
 <211> 344
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(344)
 <223> n = A,T,C or G

<400> 348						
gcacgttttg	tgccctnccc	gcctncaaat	tgccctcagtt	acaaatcatt	agggcaggct	60
tggtgagcaa	gactggcaag	cacatttttaa	gggtcccgtgc	tgtgggggttg	atccatctca	120
acttgagtca	taagaggcag	aagnggatgt	gagagaaaaga	gacacacact	agagacagan	180
agccaaagag	ggcagagaga	cttgacttta	agagactcct	gnactgacaa	ctccatgcag	240
ttnggaacca	gaacaactgc	ggctgaacca	nggttcattg	ggacatggca	aaacgctgac	300
actaacctct	tattcagaat	gtcccaacag	gccatttcgt	gtac		344

<210> 349
 <211> 158
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(158)
 <223> n = A,T,C or G

<400> 349						
agaaccacca	attgcncgct	cttaaataat	agcnaacagn	gggntgttat	aaggtgcttt	60
ataatatcaa	atagagccctn	gagcaacaca	natcacaggg	ngctagggag	ggnagagccc	120
cactgctgna	catgcaaaac	acagatgtga	acccagaa			158

<210> 350
 <211> 370
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(370)
 <223> n = A,T,C or G

<400> 350						
agaagtcttc	atcagaaatc	atggcactga	caggctgnng	ttcangttca	ggtgaagaga	60
atctcacagg	cagatggcag	ctactganga	gcgagttctg	tgataaccgc	agaagggcat	120
tcgccaacta	gaaagaacaa	acagggcagt	gtgagtgcc	cgacanagat	gagagccttg	180
gagggcagag	catcagagat	ggagacccat	cccacagggg	gcctctgtgt	ctgtgagcag	240
gatgccttgg	aaaggccaac	ttcccagcga	cacagacgca	aaggcaattc	cagcgaagaa	300
ttgctccctg	tttttaccct	aaaagtgatc	tgtcagctgc	cancctcatt	actttttcta	360
tttcctttca						370

<210> 351
 <211> 145
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature


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<222> (1)...(145)
<223> n = A,T,C or G

<400> 351
tggtcgctg ctgccggctc acgatcance ancactagaa naccactcg ctagcggagc      60
accgcccagc tcacgcacgc ggacacgttc tctatggagg acccggtgcg gaaggctcgcg      120
ggcggcggac ggccggcggg gaccg                                           145

<210> 352
<211> 329
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(329)
<223> n = A,T,C or G

<400> 352
tagcatcaga atgttcctga agaagaaagn atttnccttg nagnacacat ggagcggatt      60
tacaagagag gntnnctgct tcgccattnt aggtnanatt ngcgactgcg agatccngga      120
taaganatcn cggaggcnctn ctncctttaat ctgatgagan acctgnggca caggaagctn      180
attgtgggcn tggtaatttg ggggggagcct ttnagtacaa acccaanccc tttttaccct      240
tttnaaanag tncctgggaa caaacgggtt ccatnttttt taaccccaaa tttttaaact      300
tttgnttggg acccaaacc ttaaaaaaa                                           329

<210> 353
<211> 129
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(129)
<223> n = A,T,C or G

<400> 353
cgtctactcc atgcanganc cactgcatan aaggactgtc ccaanctcag aggaactctt      60
ccaagaaacc tgtatngact acttgaggcc ttgaactgcc tanagngtgg gnctgccttt      120
gcttcctag                                           129

<210> 354
<211> 393
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(393)
<223> n = A,T,C or G

<400> 354
gctgtgcata ccccgagtgg ggctcctgtc aggagaaaag gccatcgctc aagaagcngg      60
ctcagcggca gctgctccat gaggagcctg aagggtggtc tgcagcagaa ggaggagagg      120
acacgggagc tcgagcccca ggtgactctc tgcagagcta tggaggccag gagccgcagc      180
cgctgaggtg ggtgtccaca ggttaggggtg ccaagaaggc atgtcccggc ttctctgggc      240
cttggtatcc ccacctggaa gctggaaata ggaaatgtga gggagaaatt aacatgtcaa      300
atgctcaata caacgcgctc ggggccctac agatgggtgt ggtggcttat gcctatcatt      360
ttggctttca agttcaaggc caacttgggc aat                                           393

<210> 355
<211> 194
<212> DNA

```

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(194)

<223> n = A,T,C or G

<400> 355

gcacccccac	tcgtgttttt	aagtgtatnt	ttataagata	catgtattta	caattganct	60
tttgttacat	aatgctgaaa	tgctactgga	gatngtgaaa	aatgtttcaa	ttttatctgg	120
tccttatacc	aaactaacat	ggtntattat	tatcacctta	gtgatacagg	anataatgag	180
ctaaaaaaaa	ataa					194

<210> 356

<211> 242

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(242)

<223> n = A,T,C or G

<400> 356

tgatgaaga	aattgaaaag	cgacccaaag	aaaaatttac	cagtaaatat	tgctggtaac	60
aatcgnttag	acttncnac	acagnnnctc	anggnngac	ttttgngctg	antttncag	120
canttcttgg	accnacgcca	tgtatcaana	gngnggntg	tgaggataa	cctcatcggc	180
gatgtcgggtg	ccttctatgc	tgcgaaacta	cttcagggtat	tacgttgctg	ccagcaagtg	240
tt						242

<210> 357

<211> 236

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(236)

<223> n = A,T,C or G

<400> 357

aggacacgcc	taaatgttgt	gaagttgtat	gttcacaaag	gggattcgggt	gactgtgtac	60
acgagtgggtg	gtaaccccat	cctatttgaa	ctggagaaaa	atttgtatcc	aacagggtatg	120
gtaaccagat	gaaatgccca	gactgcagcc	ctggtgaaac	acgttattct	ctgttgatta	180
agggtgtgata	tttggtttttg	ttttcccca	taaacntacc	ttttcaaagt	aaataa	236

<210> 358

<211> 143

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(143)

<223> n = A,T,C or G

<400> 358

actctgacca	gactctgang	gcatacacca	gtagaggatg	tngaaccaa	gaagagcacn	60
tacgttcagc	atctagtcca	gaagatgata	agaagaagaa	aaggaaatct	agtcattcaa	120
aagacagagc	caagaaaaaa	aaa				143

<210> 359

<211> 129

```

<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(129)
<223> n = A,T,C or G

<400> 359
aaggaaagcc acagcattca ttacgacatg acanntgacn ctatgancaa gtgagcatgt      60
atcngaaaag gagtctngac gaaagaggan tgaatttgac attaataaag cnattttattt    120
ttaacaaaa                                     129

<210> 360
<211> 256
<212> DNA
<213> Mus musculus

<400> 360
tggctgttct ggaacgttgc tttgtgaacc aggctggcct cgaactcacc gagattaaag      60
gtgtatgaca cctctgccta gctccattct ctactgttct ctacaatgcc cgctaagtca    120
atgccacgga gaacaaaagc tcgctcctcg ctcaccagat gccgggtgga aactacattt    180
accacaagac tgtgaggctc tctagactct gagccaatca caaccagat gaaaagcttt    240
ttctcaaaaa aaaaaa                                     256

<210> 361
<211> 143
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(143)
<223> n = A,T,C or G

<400> 361
ttottgagtg ttttaagtgg atcgagctgc cgctgctaac ctgtgaactg aactgccaat      60
ttccagacaa cacaacaggg agttgctcca aagaaccttt ctaaacaggt ncncttgccn    120
cgctgaatat cgtttctttt gca                                     143

<210> 362
<211> 110
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(110)
<223> n = A,T,C or G

<400> 362
atagtgtgga agatctcagg gaaagngang gaacctgcaa gtgnggnata anagacctga      60
ctcctganng ttgtcttctg accacatata cacaatattg taaataaatg                110

<210> 363
<211> 566
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(566)
<223> n = A,T,C or G

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<400> 363
gactgaggtg gggctctttct gattgatncc ngaanggaga cngacggang tgaggctcnc      60
acatgagngg aagctgnecat tcccngaggg tgctttcttt agtgagaggn agacagaaaa      120
tcctttttcct tctatggaac agnagagccn gaagggggcag gttcatcact caagccagga      180
aaacatctcc gnttcactga ccggcgccag gcctcacagn ttgggagaag cgacctacgg      240
nnnggaaata gcattgctct gcatgcttat gggaaactgtt agaaaggacn agaagngcag      300
aaccctgctg gagcccgatc cagccagctg ctgaattctc catccgcaag nctccatcct      360
cactcctctg aactggcgct gccagaggca ccttgggaat nccagcaggt tcctgttgca      420
aatggccctc accaccaact cattgnctct gcatgcacgg ntccctcccag gggctggcgt      480
taaactctgga ctcaacttaag gggntagann ngngnnccta atccctttat tttgggnaag      540
gggccaagnt actaaacacc cttgac                                     566

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<210> 364
<211> 450
<212> DNA
<213> Mus musculus

```

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<220>
<221> misc_feature
<222> (1)...(450)
<223> n = A,T,C or G

```

```

<400> 364
actgagggtc tgagtcacan gcgcctttct tggggaccct ggnncgctat cattggnaac      60
nganagnnca ctncnctag ctnatganag gagcanaacc ctcgggnctc tgctggagtc      120
nactgnggc atntagctca gttttctgtt ncatntctc ccttantact gaanattcct      180
tctgcattca tggcaggggc accagccatc atagacactt gcctnggtat ccggnittgc      240
tgnagggncg aagngcttna gngacacatg tggctgttgc cnttctttct gcaccccanc      300
tcccaactgt tcccaccttc aaccctcttt cccattccaa cgctgctctg tcctatagct      360
tcacaaaaca nggagcgtgt ggggctgang tcaggactgt accttgggca ctattcctta      420
tacaaaatat taaatatttt ttttcctcag                                     450

```

```

<210> 365
<211> 119
<212> DNA
<213> Mus musculus

```

```

<220>
<221> misc_feature
<222> (1)...(119)
<223> n = A,T,C or G

```

```

<400> 365
ggagaatctt gaaactctcc catacataac acttcaagcc aaactggcag cactgaccca      60
atctctaaat taagcgcang ngaaatgaaa tcattaaaaa aatatatatt tcctgaaaag      119

```

```

<210> 366
<211> 183
<212> DNA
<213> Mus musculus

```

```

<220>
<221> misc_feature
<222> (1)...(183)
<223> n = A,T,C or G

```

```

<400> 366
ctatgatgac ctgccangat tctcatatga gcatggggtc ancacctgca gatgacctgg      60
tccgagangg tgggaccgat agggaaacctg ttaaatcctt acactccgaa gatananctg      120
tannaaattt aanagnttng gctnngnntn nttntggaca gcttgccaga agtgggggtg      180
gtg                                     183

```

```

<210> 367

```

```

<211> 385
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(385)
<223> n = A,T,C or G

<400> 367
aaggaacatc aacagcagcc ctaccgagaa cgcanacaaa cttctcggtc tngngtgtct      60
cctcagttgt tcagagcttg agttttgctc gaggatgatg agacaaggcn ctaagagggg      120
aaggaggagt gngctaaggc tcctgccact tntctccgnc ttnagtccac angaagcatt      180
gtaagaaggc ctgaanaaca agctgtgctt ggnccctgaat actggngact tgaggattcc      240
atctgtttca ccaggcgtgt agggaggccg ttttagcaac atagcttcct tagcagtact      300
taaagacttt tctctgcatt ggtcatgtgc caagttacat tttgaacatt ggggcaggng      360
aaggaaggac agctttggca cctgg                                     385

<210> 368
<211> 160
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(160)
<223> n = A,T,C or G

<400> 368
tgctcttctt tggcaatcac agcatgttta tttatgaact ggcttgcttg gaacctgatt      60
ctgacatctg nggttttttg ctgaagaggt taattttttc ctttttgntn ggnttgcgaa      120
cctgggtttt ggggagggga gcacaaagga ataaaaacac                                     160

<210> 369
<211> 145
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(145)
<223> n = A,T,C or G

<400> 369
atcatctatc gaatgcggac tcacccagtt ctcaacggng ctgcctgaga gagacccttg      60
aaggcgggat ggcgtgtgat aagggcagag gtcttgcccc tatcctgatt tcagaaagac      120
agcggggaga ctcagaaaaa aaaaa                                     145

<210> 370
<211> 205
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(205)
<223> n = A,T,C or G

<400> 370
cacgcgtgac atcactctgt caatcacccc aagtccactc aagggacaag aaactgtggc      60
acaccaccag aagttttttt gtttttgttt tttgctgnat ttctttctat tgagtcccca      120
taaatacagc tcaactacac aatataagac agaccaatac atggtgtgtc cttaataaaa      180
aaaatctttc accacaaaaa aaaaa                                     205

```

<210> 371
 <211> 375
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(375)
 <223> n = A,T,C or G

<400> 371
 gtcctcctga acgttctggg acactccact ccatcacggc taaatagtcg cagggcgtgg 60
 ccatatgagc anatacacagn taacgtaacc agtacctgtt gtgaggaggc ntggattgga 120
 taaactgcag gnggtagaag atccaatccc actctcccaa aatactgaac aaatttgntt 180
 atttctgggg tgggagtgan acaggggtctc tccccgtact cctggaactt aggaacttat 240
 tatgtagact aggctagcct caaactcaca ggagtgtctg gatgtgccac catgcacagc 300
 cccaaattcc tttacacgaa tcttgagcgt tttataaata caaagcggag atgctgcctg 360
 ccaccaaaaa aaaaa 375

<210> 372
 <211> 360
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(360)
 <223> n = A,T,C or G

<400> 372
 ccgtgccaac aaggatgcct tggctgaatc acaagaacga gtgccctctg catcaagaaa 60
 tatgggaaag ngcccaaccg agaacatcag gctggccgcc cgcatcatgt ggcgggtgga 120
 gagagagggc actgggctca cagagggctg nctgggtgtc cgtggatgac ttacagaacc 180
 ancgtggagc actttgggga ggaggagcag aaggaactcc gagtagaccg nggacaccgt 240
 tcttgacgta ctggccacca cagagccngc agttcagcat gcagtatatc tcacacatct 300
 ttgngngnat caactgcaac ggtttnactt ctnanntgac cagagagggc tacaggcagt 360

<210> 373
 <211> 362
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(362)
 <223> n = A,T,C or G

<400> 373
 actgagattg acgggctaga ggaaaagctg tccccgtgtc ggaaggacct ggaggccgtg 60
 acctcccagc tttacagggc agagctcagt cctgaggaca ggaggtctct ggagaaggag 120
 aaacacaccc tcatgaacaa agcctccaag tatgagaaag agctaaagct gcttcgacat 180
 gagaaccgga agaacacgct cctctcgggt gccatcttca ctgtcttcgc cctgctctat 240
 gcttactgga ctatgtgagt cagccatctc cagccactan aangacgtgg taagtgtctt 300
 cttctgctta gtaagagggg caataaagag cccangctc tgctgtcttg caaaaaaaaa 360
 aa 362

<210> 374
 <211> 390
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature

<222> (1)...(390)
 <223> n = A,T,C or G

<400> 374
 gctcattcaa tcaggtgagn tactgnanaa tatctccagg ncaaagntnt tttcnacaat 60
 ccccttngga aggtgtttcc tattagcaga tgactatgga tcnctggcag cctctggatg 120
 ctctctcgga angctctcatg gcgggggcat attgattgtc tttcaattaa ttgcatntgg 180
 tattttttcat ttatcaaaaag caaaataacnt gtnattaact ctgaagcaat acagtccagt 240
 ggcaagagat ccctgtctgct tgctgtctgct gctgtctgctn ctctggagat aagtcagcgg 300
 gaaattattc ttacaaggaa actctaggat ggtaggactt ttggaccgta ttaattaaag 360
 agaataaaaa ngaattaggg gaaaaaaaaa 390

<210> 375
 <211> 119
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(119)
 <223> n = A,T,C or G

<400> 375
 cctgcagact cacccgaaan atccanactg accaanggaa tactaangtc cctcgtcttg 60
 gtgatntnca gggcgtcaat aataaagaga gagcagcagt tgggggaaaa agaaaacaa 119

<210> 376
 <211> 284
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(284)
 <223> n = A,T,C or G

<400> 376
 acctttcttc tttttnaata cactcacagt atcanaacac cacggtttca tttactaagc 60
 tctangagac cattntgnct gtggaggcaa ggggcatttg gncctgacct angtgaacag 120
 ttgccttaaa ggggaaaaaga ttncacagcag ganggctcag ngtttaaggg gcacttgcag 180
 ctcttgcaaa agncctgggt ttggtcccca gcgccacat agcagtcaca actattccta 240
 actccggngc cagagtctct gaaccctcct ctggcctcca cagg 284

<210> 377
 <211> 255
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(255)
 <223> n = A,T,C or G

<400> 377
 cgtttttcct aaatattgan actggcttgn atcaagacac acagnatatt gttcacaagc 60
 atgtaactat ccaaaagaag tcttataaat attatgagca tggcaaaatc atccaggaat 120
 acacccaaag tgtactttac caagataact tcagggatag acatgttgag tcatcaaacg 180
 taaacagaca tgaaactgga aacaccagag aaccttgcaa atataaaaaat tgtgtaaaact 240
 gtttaaaaaa aaaaa 255

<210> 378
 <211> 110
 <212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(110)

<223> n = A,T,C or G

<400> 378

aaatctggaa	cctggtgtcc	tgccatgtg	ctgaatgcac	gcacagcaca	gctctggnat	60
ctgttttaaa	ttatccatta	aaataagtac	agtcctggaa	aaaaataaaa		110

<210> 379

<211> 210

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(210)

<223> n = A,T,C or G

<400> 379

ctgcgtctgg	gatctgcctc	aacgccttgn	gagtcacccat	cnacannatc	ggagaatggn	60
ccctccgctt	cttcggctgt	ntggtcactt	nnatctttca	gnngnattnc	ntangctaata	120
caaatggacn	ggaccancat	tttacttgga	cggacacccat	agnacctacc	tcttctnctg	180
nggtctatct	aggggggttg	ggtgggggga				210

<210> 380

<211> 112

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(112)

<223> n = A,T,C or G

<400> 380

acggggccatg	atgaaatcat	ccccgangag	catccangaa	ggngaagctg	agngagcgng	60
gggaggtgtc	caccttcaca	gaggaagnta	tanatcgaac	cttgtcaagg	ta	112

<210> 381

<211> 108

<212> DNA

<213> Mus musculus

<400> 381

ccctctgctc	tcagccctct	gggattttgc	ttgtttgctg	tttttgttta	gttcagatct	60
attttgtttg	tggtttggaa	actttcagac	cgaacagaga	aaaaaaaa		108

<210> 382

<211> 181

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(181)

<223> n = A,T,C or G

<400> 382

catgcataac	gggcatccag	atgangaatc	cgtgaacntt	tngactggag	ttgatcncta	60
acccaatgga	ctttncctgt	gctgaccaan	cctttcatca	caagcattat	atancggttg	120

ntgnccccctg naaatgttnan canacacgaa gngagatacg ctgtatacga ccactgtgca	180
c	181

<210> 383
 <211> 210
 <212> DNA
 <213> Mus musculus

<400> 383	
gtgctagagc gaatccatta taacccaggc agaggaaaag gccgatttcg tgatcattcc	60
ctctgaagga atagagaaca gaacagacga gccagactct ccatcatccc gagactggag	120
gcctgggagc cggggaacct acctggaagc cacatgggaa gaacagctgt tggagcaaca	180
agaacactta gaaaaagaaa tggaggaagc	210

<210> 384
 <211> 487
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(487)
 <223> n = A,T,C or G

<400> 384	
agctccgacc acagcgtcca gaaacagacc ccaaccggaa gaggcggatc ccgatagaca	60
ccaaccggaa gaggcggctc cagatgagca ggagagaggc tgctctaccg gaggtcccag	120
gtttgattcc cagcgcgccac ttggcagctc acaactatct ctaactcgag tcccaggaca	180
tccaatgctc atctttgaca tctgcaagca ccagacactc aaaactgtac agatggacaa	240
gcaggcaaaa gaccccaca cataaaatac gtaaatcgtt ttaaaagtag cagaagaagc	300
anagttaatt agactgaggg acagatagga aaggtcagga gagcatcttg aaaatacact	360
tacctcagct gcaaagaccc ccgctgcagc gcccccaact tctgagaggc agtaagaagt	420
gttgaaactt gtccctnagg ggtatttgac tctaggatgg gactttcttt caagcattga	480
aaaaaag	487

<210> 385
 <211> 431
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(431)
 <223> n = A,T,C or G

<400> 385	
cacgaaacaa attcagnacg gcagctcctt ttggggccta agcactggag acactcctag	60
aagttttctgg aaatctttgc tgttggccct gaaagacctc gacctctcgt cctgagcgct	120
atacagaaac ttcccgtaga ggcaccgtgg gtcaccattg gtggatctgt tgtatgcttc	180
ctgtgcctcc aacatgtcaa ggccactcca gcctgtaagt cactcggacc cagggaggct	240
tgccaatagc caaaccaaaag aggcctgtga ggctaagcca ccagaagcca ggcacctatc	300
acatctatcg gctcgggaaa atgtcccagt ggcntgttnn gatccanctc ttgaaacgga	360
tcctaccggg aaccnaatcg tacacaacaa aaaggcggcc gacccagacc atcctgacct	420
tgccagcatg t	431

<210> 386
 <211> 217
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(217)

<223> n = A,T,C or G

<400> 386

aggctggcac	ggtccgacg	tctgtgtgga	agcttctccc	tcccttctga	gcttctctag	60
actccttaca	gcgcacaggc	acagacacat	cacactgcaa	tccagggtat	gtctacatnc	120
gagctgcnc	gnatanactg	gangggcttt	ggangggatc	cnttgncaga	gcacncatgg	180
tgctggatta	aaatccanct	acaggtaaaa	aaaaaaa			217

<210> 387

<211> 284

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(284)

<223> n = A,T,C or G

<400> 387

acgcatggac	acgggnnggt	ctactacatc	accacacggg	cccaggtttg	actccataca	60
ggacctagt	cnggcacata	catggaagt	aatgatggc	tgtgctacnt	gcttacggcc	120
ccttgtagca	ccactaaacc	cccagacaca	tagantntgg	ncaaggatgn	cgggggagat	180
nagacctgga	acttcttngc	acttngaact	gcaagcttgg	gcaccntntg	cttanggaga	240
tnanaactg	ggcacttngg	nactgcagca	caaaagagt	ggaa		284

<210> 388

<211> 774

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(774)

<223> n = A,T,C or G

<400> 388

ccccgcctgt	gtatcaccac	cancgtanca	catgcacgtg	tgcgacaggc	cttacnttat	60
ggctcntccg	acccactcc	ccggattgat	gtcccnngct	ccggacaanc	tgcaggccng	120
aaaccttcag	gaaactgaaa	ccnccccctg	ngggcagcct	cccggatnac	ttcctccnaa	180
tccttcccca	gcaaattggac	ancnttcagg	gtcaccctcg	gggctccnnc	cctatgagtg	240
gagagggagc	ccacctccgg	cncagggcc	catggcctgt	tacnnanaca	gnccctngaa	300
ncngtacctg	gaaaataaga	gaattgccct	cttcntgcan	aatgaggaat	tcangaaaga	360
gctgcagcna	aaccgggact	tcctcctcgc	ccngaaaana	aaccnattga	natgtgaatc	420
ccagaaatcc	aatccccctnt	gcggcggttg	ggaaatgacg	gtgggtttcc	ctcctctgtc	480
ccggaacnt	gantncctcn	naaaagngt	gnangatncc	ttgtgccngg	acancttnta	540
tnctgggna	attctanct	angatctntt	tgaantcncn	cancggtngt	aacaaaaccg	600
ttttingaat	tgaaagaaan	aanttttccc	tgntanttt	gatggggntt	gctgtnatnt	660
gaagncaggc	tcccggtnta	antggnaang	gctaggttta	ctaaaaaaa	attcggtggg	720
ttngcnaaan	nggatgntgg	gttttgggtg	cnaaaaggcc	gaaaaaaaag	gaaa	774

<210> 389

<211> 373

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(373)

<223> n = A,T,C or G

<400> 389

ctatTTTTtg	aagaccttcg	acctccatnc	tctggctgca	tttctctgtc	cttctggnaa	60
catcgggagt	ccaccagang	aggatggagg	cacggcggtg	gacattcatc	atgggttgga	120

cacccgcaca	cngtgtgcc	tggtggcttc	acaatggg	ttncngtct	gntgtgtgat	180
gcactcttag	agcaagctct	gtggctcaga	gggaangaga	cgggatcact	cagaccctcc	240
cactccatat	ggccagtgan	gcgtccagga	agacgcttcc	tgctagcgtc	atcataaagg	300
ggaacgcaaa	gctctcagtg	ctttgccctg	agccccactg	gatgtgggtg	gtatgcaaaa	360
ggaagcttaa	cct					373

<210> 390
 <211> 388
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(388)
 <223> n = A,T,C or G

<400> 390						
ctctaccac	ttgtacataa	tccagcatcc	agcagaggaa	agcagagtgt	tgcgcacagt	60
ccctctgcta	gcagcatgcc	ttccccaga	cagatgcaca	gtcaagattg	gccgccgctt	120
cagtgaagag	cgagatgttg	aacttgcaac	tgtttgccgg	gactntggta	cattaatatt	180
atatccaggg	gctgaagcta	ctaattngga	anaattnata	ttanattctc	cngtttatcc	240
ttccacaatc	atcctcattg	atggtacatg	gagccaggct	aaggacattt	tntataaaaa	300
ttccttggtc	cgacttccca	aacanataaa	tgccttgctc	agtctcatn	anaanaagct	360
tccttctgca	gcagatggaa	acattttac				388

<210> 391
 <211> 122
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(122)
 <223> n = A,T,C or G

<400> 391						
cctgatggac	aacatgctgc	ggatgccacc	ggngatgaga	gcagggtttgc	accgccagct	60
tnngttcggt	acggcctttg	tnnttgctgg	atacttttat	ttaaaacggc	aaaactattt	120
gt						122

<210> 392
 <211> 184
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(184)
 <223> n = A,T,C or G

<400> 392						
tcccagaaca	tggtgctgct	tatatacgnc	cnntgatang	cgtgnctcac	accngattg	60
gttatnctct	acgcctcatt	tgcatgttcc	tcatntggng	ggctactctc	tgtacctcac	120
anagcctcat	tatcatacct	catttgcatg	tctcacatgn	ctattggggc	atacttttac	180
agct						184

<210> 393
 <211> 476
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature

<222> (1)...(476)
 <223> n = A,T,C or G

<400> 393
 gcagccacca ggcattctgac cctgaggaaa aagggaagcc tggcagcatc aagaaggccg 60
 aggaggagga agaaattgac attgacctga cagcgccaga gacagagaag gccgcccttg 120
 caatccaggg caagttccgg cgattccaga agaggaaaaa ggattccagc tcctgaatgg 180
 ccaggcctcc ccttaaccct tctacttctc ctntgccttc cacagctctg actctcacgt 240
 atctcattcc ttcattccctc tagcctctcc ccaaggcaag cttaaccctt atatatctt 300
 gtctcaggct ctcttaagcc atcacagtag tagaggcaca aggatgcaa ggtgaagact 360
 ctactgtgta gtcactaggc taagggtgga tcagtccatt taggagaaca aaaggttttg 420
 agatgggaaa ttctccctt tgcctaatagc taagggcagg agggggcaag ccctca 476

<210> 394
 <211> 184
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(184)
 <223> n = A,T,C or G

<400> 394
 ccttacagac tcaagactga tgagtaagga cagagtantn ntngcccgn aagaagacc 60
 canactaccc tagaacagag atggcnnacc ttctcctgat cgttcctgng ttgtgccact 120
 gagggagaga ggggtgangac acacanagcc atcagggtan gcnggagacc ctgaggcccc 180
 tctg 184

<210> 395
 <211> 339
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(339)
 <223> n = A,T,C or G

<400> 395
 cctcattcct gacttcagtc tcacgtggga ccggcccttg gtgctgacag catgggggac 60
 tgnactgnag ctggcatgna tanagccanc ctggnttgcc cactggctga aganagcanc 120
 ggngggcgaa gcagananng agngngtggn ttctctctga caatcttttt gggccactc 180
 ccacgatgcc agcctccaga agagggaagc tgtgtgggag acggtgtgta caggccccga 240
 ctctggcctt tgctctacgg agctggcgac ctctgtgtgc acaggtgaca tctagaggat 300
 ccggggcggtc ctcgatcagt gntggaaaaa aaggggtct 339

<210> 396
 <211> 289
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(289)
 <223> n = A,T,C or G

<400> 396
 ggaggggatga ccaggcgtgc aaaagctgac gcgaggatct gaaaccagat gaccgggaa 60
 agggccngnc accaaaagtg acctcctttt ttaacccttt atgtcaaaat ataattggct 120
 aatgcaagag tctaccctgt taccgncac tttttgttcc catcctataa aaatattgta 180
 gaaatattgg acagnctccc ttcaggaatt cggatcagag gggggagctg cccacctccc 240
 tcagcgctaa gaaaataaaa cttccatttt taagcttcaa aaaaaaaaa 289

<210> 397
 <211> 264
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(264)
 <223> n = A,T,C or G

<400> 397
 agactgaggt gttcttngtg nccgacctnt tgcgagactaa nacgagcctc tcaactgcccg 60
 cccctgcgat cagggaggga gatcctgtct cccgtggaca tcatcgacag gaacaatcac 120
 cataacatgg tgtagatgct gcggcctccg gagcgctttc tctgaagcga ctgcacgttc 180
 ctgctgctct ccgatctcat cagacagtag aatgtaggga aaagcttttg cccgatggat 240
 tttgaaaaca tttaaaaaaa aaaa 264

<210> 398
 <211> 326
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(326)
 <223> n = A,T,C or G

<400> 398
 aatactttta gacctactgg aacctcactg ttataggcta caccttgga aaaccatcat 60
 attgaaagac attgtcaaag ttcaagaaga aatgaaaggt ctatgaggaa caaaaagtca 120
 aactgtgaat gcattgtgga nggggggnat cttttactct tctattaata tatgnatcat 180
 gtgtcacaat tgataaaagc catgttagca tagggatatt gaaagaagca atgtaccgct 240
 ttctatccca gaactgtgag aaaattgtca gattctatct ttggtagaca ttctgagtat 300
 gataaaagtt tgcaatgaaa aaaaaa 326

<210> 399
 <211> 216
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(216)
 <223> n = A,T,C or G

<400> 399
 tgtgttacc atggagtcan gacacggncc ccggagcgtt nccaaaccaa ncaggtcccg 60
 ttgattaaag tcaaagctca cntacaggag gcntgngccg gaggaccaca ggcagggcag 120
 ggaggtattc tgggacttct tgaatagcta ggantcagtc agaacttgaa tttcgacagt 180
 tttgaagacc gtctgtgccc ttcaatcaaa aaaaaa 216

<210> 400
 <211> 244
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(244)
 <223> n = A,T,C or G

<400> 400
 tggccccgc acatggtgcc agctcttatg actgncncct gacttnatca tatccctnaa 60

gatanncaca gtagccttga gcttgtattg cgcanangcn ccacanatgt aagatcanat 120
 natgtgacna tgtattnctg agccaacgaa ctgngcctat gtggactggg ctgaggggga 180
 gtggactgga ggggataaaag ggggatggcg gagagaggnc agcanttctt tttcctgcac 240
 attg 244

<210> 401
 <211> 124
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(124)
 <223> n = A,T,C or G

<400> 401
 tgagggcatg ttgagtcggc tgcattctagt ngatccaacg agtaggagtg ttggctggta 60
 agctgggcat ccgtgtatct gagtttctta gcaataaagt gaaatgcaat cttaaaaaaa 120
 aaaa 124

<210> 402
 <211> 113
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(113)
 <223> n = A,T,C or G

<400> 402
 agtggaagct tgtgancatg aggagctnng ancatgnaga gggaagcnan acnggagggc 60
 tttntgcccc agnngagaga gatcgcccgg caggatgaagg cctatgagaa gca 113

<210> 403
 <211> 104
 <212> DNA
 <213> Mus musculus

<400> 403
 atacatgcct cacatgtgaa gccagcccc ttagctgaga ccagaattcc aggaaaccac 60
 cctgtctgga aggcccaggc tacggagaac cctctgaaag tgaa 104

<210> 404
 <211> 141
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(141)
 <223> n = A,T,C or G

<400> 404
 tgttcccatg aacatgcaga aagaggagnn cgtgagtgtc tgggtccggg accccaggat 60
 tcanaaggag gactttnggc actcttatat cnactatgac natntgcctt cacacnacag 120
 agcagaggag acttgccttg t 141

<210> 405
 <211> 101
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(101)
 <223> n = A,T,C or G

<400> 405
 ttgacccttg catggcagga gaaaattnan tgcttgagtn gttctctgac ctccacatgc 60
 ggtcctgnta catgggntgt ntgcatacac ataaacacac a 101

<210> 406
 <211> 160
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(160)
 <223> n = A,T,C or G

<400> 406
 gcctgaggcc caacctgcct gaggccaaac cggntctctt ccaagatttt cgggagttat 60
 cttcgagagt tcccactaaa aggttgatct gtctacttca aaagaacttt acttgtttag 120
 ggatgggcct cccctcttct ttataaagtg tgtttgctgg 160

<210> 407
 <211> 185
 <212> DNA
 <213> Mus musculus

<400> 407
 ggaatgcctg aggactctgt cccctctgtt taaagtctcc aggttagtaa gccaggaggg 60
 agcccgccac ggccacctag tcagcaccct tccctgcccg ccatggatca cgatgagcta 120
 ccccgggagg gctgtggggg gggggcaggg ataggtaag gggaggggat ggcaaaaaat 180
 aaaaa 185

<210> 408
 <211> 347
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(347)
 <223> n = A,T,C or G

<400> 408
 aagagatgga ggggcaagtt ctgagtgatg caactgctgc ggantaggag ctaggaacca 60
 gttttacatc aaggaagtta acaccgtgtg taaagaagat gggcagtata gcagtccaca 120
 caagtggcct tggtgaaaag actgccaggt tgagtggcct ggtttggagg aggtgtnttt 180
 nttaacgctt nctccagctg cagtggngct taggattctg ctggtacatg acgcacaatt 240
 ctgaaactca ctcatgactt aagcactgga gaccttcact ggcagactgg ngctggcgac 300
 gctgggaggc tgnccgctgnt gcactctncc ccaccgcct accacag 347

<210> 409
 <211> 251
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(251)
 <223> n = A,T,C or G

<400> 409
acgattcagg accatnagca ccatnagaag ctcttgcctt gtnagcatca ttntctcccag 60
ncctcaaacc ttgtcccttc tgggnaccac ncgagatgcc cctacgcgag aatanncnng 120
ctntnctctg tctctncaag nontgagncc ttngnggggg agaactttat tnncttcagn 180
tggtgtctgn cctccacatg cgtcctgtng catgggtgta tgcatacaca taaacacaca 240
tgcacacgtt g 251

<210> 410
<211> 150
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(150)
<223> n = A,T,C or G

<400> 410
tcacagtggg cccttggatt accccccctt ttttgcattg nttgagtacg ccttatcaca 60
tattgccaaa nacntntgaa taaagagatg ctcaatatc ataacctgaa ctattacagt 120
tcaaggacat tgcttttcca aaaaaaaaaa 150

<210> 411
<211> 241
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(241)
<223> n = A,T,C or G

<400> 411
ggcccttaat acacacacgt gcttntantt ggtataaata acgtnattgn gcagaccaga 60
aacntgagac aacttggagg gacttgcagt nggtttcatg gngctgaggg agtgaaaacn 120
tcacccactg ccatgggttt gcaactataag cgcctgcatn agtaatnttt aaaaacatnt 180
ancacagtaa nantttcnaa antcttttct atgcnagctt atctngttag gcattatttt 240
a 241

<210> 412
<211> 117
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(117)
<223> n = A,T,C or G

<400> 412
cctgcaacat cctggccttt tctgcagaaa gaactganng cttinggaaa ctgtaaagct 60
tacctctgng gaaaaacccc aaagcattgt ttcaacacag gtttccttaa gttaaaa 117

<210> 413
<211> 125
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(125)
<223> n = A,T,C or G


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<400> 413
agtaccgtga agacatggcn agtccaagaa ccacacctac ctacacacta ttngcagatg      60
accagtgtcc tgtgctgttt ttacaaataa acttgaggca agatcaaaaa aggaaagaaa      120
aaaaa                                          125

<210> 414
<211> 171
<212> DNA
<213> Mus musculus

<400> 414
gaactgagga ccagttccag gtaattgcat ggctgctgca ttcccgtgag gcccctgtga      60
gcggcatggg aaggcttctc catcaacctc tgccctcccc cagggtgcctg ctcttgatca      120
aaccaaatca aagcgcaaac aagttccagc gggaaagttt aaaaaaaaaa a              171

<210> 415
<211> 415
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(415)
<223> n = A,T,C or G

<400> 415
aactgagctc ttcacatatg gtgctaaaga tgtctactgt canctcanac ctgtctggaa      60
gtntntntcag aagactaatg cgacctgaan ttcctgggga gggtanagtg gctgcagccn      120
cncctgtgta nccgattnta tatngctgat anattgacta caagcccgaa aanggnataa      180
nggactgtgg gnncccaggn atggagctga tttcaggnat gnnactacca gctctatcan      240
catttngac tgcanacgac tctaattgctt tggacttgan tgcattctac ccgccngacc      300
tttcttatg tatctgaaga gaatnccctt gccnctctg cttgcaaccg ctctgcaanc      360
tctgatctca ccgaagttnt nggngttcca tattttntct attcccctac aagtt          415

<210> 416
<211> 356
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(356)
<223> n = A,T,C or G

<400> 416
taaaaacatg cccctgaccc tcttgccaaa tgagtntctg ntcattgaggc ccaccaagat      60
gaaccancca aggaggntc gtgnnctgcc ctgtacgaac antgactgct gacngtgtga      120
tgagcaagct gagggtnctg aaatgttgct tgccaangnc catgaaggaa gtggntcac      180
ctggtcaccc canganggtg gcanactggc ttgctgganc atgctnngcc agaattctgt      240
gancctctcg gaccncttct caggccngga cttattnaac ctancccaag angatattna      300
nataancccc cantgtcccg agtcttntct ganaatgngt ccaccaacat cttaga          356

<210> 417
<211> 346
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(346)
<223> n = A,T,C or G

<400> 417

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cccggaacca	ccctttggac	tccttggana	agcaaattga	aaaggcgggg	gtggnacaac	60
ggggntgccc	tatncctggn	gnttgaaatg	atagtgagcg	ttgttggtccc	atagcctgtc	120
attggacaca	gtaatgattc	tgggtagaac	acagagcttc	cccattgttg	aaagcttagc	180
aggatccttg	ctacaagttt	atttacctct	agaaacaagg	tcagtcatgc	agaggaagga	240
aagtaacctt	ttccgtgcca	gacactgtac	tgagtgtctc	cctgtttgag	ctcctgcagt	300
ctaattgcttt	cttaacactt	attaatcaca	ataggaagct	gggtgt		346

<210> 418
 <211> 119
 <212> DNA
 <213> Mus musculus

tcgggttcaa	acgtttgctg	agagatgccg	tggttaacct	gacgccacaa	tggaacattc	60
ttcccagggc	gtagaagaaa	ctccgctgta	gagctctgct	gcataaggcc	acacagtgt	119

<210> 419
 <211> 167
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(167)
 <223> n = A,T,C or G

aactgagagg	ccaacagaa	acgnagagac	attactgcnt	gtgtccatga	ctgggacnng	60
actctgtncg	gntttccctg	ggaatccacn	agngatcatg	ctcttcnaag	aaccaatgct	120
atgcaacann	cncctcacat	ntcgagtga	catcaatgtg	gaatgag		167

<210> 420
 <211> 313
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(313)
 <223> n = A,T,C or G

gaaaagggtc	atgcagnggc	ctgagggtgg	aggnataccg	ntaagccttn	cacgcgactg	60
antgngggnt	gaganaaaact	ttcntaatng	gatnntganc	atgccncttn	atctctnnaa	120
gncttgataa	ngcctannct	ctatntctaa	caggctntga	gtagannacc	tcatgccact	180
gtccatncat	tgataagagc	atgctacnng	anagcgccat	ccttttgatt	cccttctcca	240
gctttctctc	ttaactgtat	gnaaacactg	caaatgaaga	acaccctggc	taatnctaag	300
gtaaaggctc	tga					313

<210> 421
 <211> 196
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(196)
 <223> n = A,T,C or G

gagctgctga	gagccgacng	gaagcttntt	gaacnggagc	cactgagaat	ggacacttgg	60
atnccacttn	acccttggaa	aacacacgat	tgtattoaan	gagggagaa	aagngantgg	120
tattgatggg	atcttggttt	cagtanttaa	gaaagtcnaa	cgngaattga	ncgagacccc	180

ttgtatgccc aatgct 196

<210> 422
<211> 272
<212> DNA
<213> Mus musculus

<400> 422
aactgagggg ggagggcaag gtttggagac atctgaagcc aagtcctgcg ggccacatga 60
gatcttttgc ccattttccac cctgctgttc agtcctgggt atcactcacg gccagagctc 120
ccgagttacc tttgctgcta tgccagcccc atgcaacaga ctgtccaccc cacggtcagc 180
ctccacaaca cccagcaacc cggtagaaac aaaattctag aagcttataa ttaaggagtc 240
ggattttacgt gtcaataaat tttcagttca ca 272

<210> 423
<211> 459
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(459)
<223> n = A,T,C or G

<400> 423
aactgaggtg gggctcttta ccctatatac ccttggccgg ctaccgggaa gactgcgtct 60
cctgacgatc gtaacgaana tgtaccngtg ctttccttnt ganagtnaan nccgccctaa 120
tatgtgcanc angctaaccg ngnggaanct tgcctgccag aaanaaancg cctgtngtnc 180
tattanggaa agccgngnac taangtctgc ttatgncaaa ngcccagnaa tgtccatttg 240
agatccanga gccacnaaga aggggggcta cttggccaac atggctgata acgtgcctga 300
ggcatgccct ntgacctcac cagngtanca cagaaccatc catacaggcc ttgggcagct 360
ggaaatttac actgntagct cnoecatgtg ctaagttagg aactggattt ggattggctt 420
gggntggact cttattttcca agactggtga gggaaacac 459

<210> 424
<211> 277
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(277)
<223> n = A,T,C or G

<400> 424
acaaatctgt ggtcataaag acagacagtt tnaatgagaa gacactgcaa atgtgctgga 60
agacgcagct gtcctgagag ggcacggngc actgncggtt acaggggtaca agtatntgtg 120
accancgaga cccattagtc cacactgctc gtcccgtgca tttttcctat ttaaggcaaa 180
aaaaatcatn gagactagag tacttttgaa tttctagaag ctcccacctt attctgaaat 240
taaaataaaa cccgtgctgt tgggtgtaaaa aaaaaaa 277

<210> 425
<211> 117
<212> DNA
<213> Mus musculus

<400> 425
gggctgcctg ggctaaatag tggattcaag accagcctgg gctacataag acactgtctc 60
aaacaaacaa cacaaaacat catcattaaa aacaacaaca ggagtgaata aaaaaaa 117

<210> 426
<211> 124
<212> DNA

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<213> Mus musculus

<400> 426
aacatgagaa agtatagctt ctaccattga gctcaatgca ctgtgtgtga aggcgctggt      60
tgctgctgta gggagagaat acaaatggga caataaaaga ctccgaacca tggaaaaaaa      120
aaaa                                           124

<210> 427
<211> 112
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(112)
<223> n = A,T,C or G

<400> 427
cggaaggcat gccaaacngc ttacgcttcc caaggcacia gatctttccc agcatgggaa      60
agatcctccc tccctccntt nttccacccat acactcaata aaataaaata aa           112

<210> 428
<211> 258
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(258)
<223> n = A,T,C or G

<400> 428
aacatgagtt cggccggtac tccgctctga tcatcggcct ggcatacggc gccaaagcgt      60
acagttacct anacccccnn ncagaggagg ngaggagaat ancagcnnnn gnanagaaga      120
gactanntga nttgnancgg ntngngagag aactggcagg aagctcaaga tgacagcatt      180
ctcaagtga ggcgtcagcg gcttgctttt ctctagtcgt tgagaacgaa taaagcttca      240
ttgtgtgaaa aaaaaaaa                                           258

<210> 429
<211> 351
<212> DNA
<213> Mus musculus

<400> 429
ggaagagact gtctttgaaa ccaggaatct gagatgatgt tgagatggag atgacaggcc      60
tgcaaggaca agagaaaaca tgtagttctg tgagctctga tgtcaacctt cctggacaga      120
gcctgcacag gccctagggg gcagcataga gacctcattg agactagccc acagactgga      180
gggcccacaag gccaggctga tgtgggctgc tccgtcagcc tgccctcctgt aagggacaag      240
agcatcctct gataaggtgt gatggagcag ggggcctgag gatctctgtg cgccttctctg      300
ctgctttggc aacaataaat gaagagtggc tttgtagctt aaaaaaaaaa a           351

<210> 430
<211> 179
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(179)
<223> n = A,T,C or G

<400> 430
agtggaaagc ctggggctga aaacggtgag gctcagngat gggacaacag cctacngtcc      60

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agcaggctgn naaangggga gaagctgntt gaagggnaag ngatccagct ggaggacggg 120
accacctgcn nacattccacc angtgacgat acngaaagag tntttctcct ttgaagacg 179

<210> 431
<211> 112
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(112)
<223> n = A,T,C or G

<400> 431
caacagaaac atcctacttg gaaatggctg cnggctcaga acctggaanc nngtagaann 60
tagccctggn gtagntgaga aatccaacng ggtgggccac cagttataca cc 112

<210> 432
<211> 137
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(137)
<223> n = A,T,C or G

<400> 432
tatcaactga caaaagnctg ggtgatatgt tctttctccc agngatgaag ggattntctn 60
ctctagggtt nccctcagac cntgnanaca tctgnttttc atngaccatc ngccccaata 120
aaggacccta actttaa 137

<210> 433
<211> 400
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(400)
<223> n = A,T,C or G

<400> 433
ggctcttgaa tgctgggatt aaaggcattt gccactacca cttggctggg atctcttata 60
tgctggacta gccactgcaa ctgagaatcc ccctccacaa tggcctntct tcaggacctt 120
cagccctgcc acacagtact aaacctcagg tgnctctcat gacttcttca tgctttcaaa 180
accaacacca tctagccgaa tcttacacat tacciaagntt ggctggcagc atgagatgca 240
gntttggcca ccttgnatna cagcttttat gtgctgaacn ctggggagat aacccctga 300
agattttacc ntcaggagat gctggccctc ttactgaact aatatttcan gttctagctn 360
acctgcaaca atttgtatcg ntaaagcaat aaagcaaagg 400

<210> 434
<211> 516
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(516)
<223> n = A,T,C or G

<400> 434
gactgagcat tcccgtgggt tggtatggct atcggtgga ccctgggttaa gctggtttac 60

tttgaaccga	aggatatcac	ggcagaggaa	gaacaggaag	aagtggagaa	cctgaagagc	120
atccggaagt	atttaacttc	taacactgcc	tacggcaaaa	ctgggatccg	ggacgtccat	180
ctggaaactga	aaaacctgac	catgtgtggg	cgcaaaggga	acctgcactt	catccgcttc	240
ccgacctgtg	ccatgcactt	gttcatccag	atgggcagcg	agaagaactt	ctccagcctc	300
cacaccaccc	tctgtgccac	gggaggtggg	gctttcaagt	ttgaggagga	cttccgaatg	360
gtaggttggg	cttgcccatc	ttcgaacagc	cagctctctc	atgtgatcat	agtgtgctca	420
tctcatgcta	agacctggac	cattaacctt	gggacctggg	catgtctgtg	cccnggggtt	480
cctcttccat	atgataataa	atatatgacc	ctttca			516

<210> 435

<211> 197

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(197)

<223> n = A,T,C or G

<400> 435

tcaccctgag	tgacggatgt	gagataagag	atacatgcgg	antgtgannc	actcatcnca	60
gttttgcattg	gntntgnntg	ngananatca	catnctctnc	ctcntnatgt	ncctccggag	120
acggatgtga	gaaaagagtt	acatgcgant	ntgagtcagt	caacacgttt	tgcatgggta	180
agttaaagaa	ataaaaaa					197

<210> 436

<211> 264

<212> DNA

<213> Mus musculus

<400> 436

gtgcatccca	ctcgattggt	tgaccgactt	cttgagcggg	tgagctcctg	ttggaagcct	60
tgctttatgg	cgctgtccca	gtgagaagcc	gcttttctgg	cattcgccag	cttcgggtca	120
catgcaacta	cttctcttcc	tgccgtctct	gctgggagtt	tgtgaagttg	tttattctgt	180
tacagcttgt	ttgactttca	cataggcctt	atagtctaata	acaattgaga	aaaagagaaa	240
atttatgacc	ttgaaaaaaa	aaaa				264

<210> 437

<211> 162

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(162)

<223> n = A,T,C or G

<400> 437

ctaaaagagc	agcaaagaag	ttacnntgat	tttgagctcc	aggccctgat	gagttttgaa	60
gacaagtga	ggtacagtgg	gtgacagctg	tgtccttgga	cccagcaaaa	gctaataaag	120
aaaataattg	gaatttaaaa	tataaatatc	taataaatac	tg		162

<210> 438

<211> 262

<212> DNA

<213> Mus musculus

<400> 438

gtcgttggtg	ctgccagggc	gtcaataata	aaaagagagc	agcgttgggg	gataatgtcg	60
acatttccac	tcccaatgac	gtatatgtta	cagaattgga	cggctgaatt	tgaacagatc	120
ccttcgagaa	ttgagacttc	aggatcaactc	cacgcgcttg	gacctgtcgc	tgaccaaagg	180
attacccaat	tggatctcct	cagcatttttc	tttcttttaa	aaattgggtg	ggattaatat	240
tatttggaga	tacaaaaaaa	aa				262

<210> 439
 <211> 125
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(125)
 <223> n = A,T,C or G

<400> 439
 aggccagggc ccttgtggga cccagcagct cattcaacat aaaagtatat ttttgaagta 60
 cctaaagtat aataacctca cctattatgc caaaattaaa taatcangaa tttacaaaaa 120
 aaaaa 125

<210> 440
 <211> 101
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(101)
 <223> n = A,T,C or G

<400> 440
 ggacctggac cgctggctgt tccttctttg atcccaggca tgatttcagc ttgtagaata 60
 aatgagaaat gcctgtnggt ttaattaaaa gaaccgcatt g 101

<210> 441
 <211> 423
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(423)
 <223> n = A,T,C or G

<400> 441
 taacaactgg tggagcccag agccctgggc gaggatatgg ctgtgtgcct gaggaccttc 60
 acacaggcac acagtgtctc acctgtcttc ttacggctgg caatgagatg gtgtcctta 120
 caccgtggac ccccgagggt gtcttntctca ccaccttcag ccggaaagtg cctgaccgta 180
 gaacttcatg tgtattagtt gctcctgaga agaggaagag ctgttttgat acccgatatct 240
 ttcgaggtgt cagtccatgg tctttggctc cactgagtcc aggggtcacag caagcctaaa 300
 caggatgggt ggctagacct gccgaggggc agacctcgaa gctcacagca gataggaagc 360
 tcagagataa gactgaagac aagcttcagt gtacttacat ataataaatt aaatccttaa 420
 aag 423

<210> 442
 <211> 396
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(396)
 <223> n = A,T,C or G

<400> 442
 tctggctgtc ctggaattca ttatgcagag taagatggct tganactcac aagagatcta 60
 actgcctctg nctcttgagt gctganatta aaggtgtgtg acaccatgcc taagtgtccc 120
 aagtttaaac tttccagctt ggaagtaaat gaccaggaaa taatacagtg aggattccag 180

cagagatcac	ctccccaggc	atcctaactc	ccaaagtgag	agatactctc	ctgttatcac	240
tcaatctcca	tcgacgaagg	agccactota	ccactctggg	aggtgaacaa	cggaacacaga	300
cacagaagca	gactgcccac	ctgatggggc	agttatgtca	atggatcatg	aacaagttga	360
gtcacaagat	ggaaccagga	aggcaaaggc	ccctga			396

<210> 443
 <211> 217
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(217)
 <223> n = A,T,C or G

<400> 443						
cttgaaggag	tacaggaacc	acccaaccct	gcaggctctnc	ttgtaccggt	cctggagaca	60
ttcccccaac	atcacctgcc	tgttacaggt	ctgcagcata	gtcaccacct	gggccatgat	120
tgcatctctc	ctgggaagac	ccatgccctg	agagcagtga	gccacctcag	cttctgtctt	180
agtctctgga	gatggccctc	gtggctcgtt	tgtattt			217

<210> 444
 <211> 184
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(184)
 <223> n = A,T,C or G

<400> 444						
tcactgtcgc	cgcccacagt	gacgncnnc	acagaaagca	cacaccgtag	ttgcggacgg	60
cctgtggtna	agatgtcttt	gccatcccca	caggacggac	ggacnggant	ccacaagggtg	120
cgcagtngtc	nccgaggccn	gccnnganag	ganccgattc	ctcacaggag	gaaggagcac	180
gccc						184

<210> 445
 <211> 185
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(185)
 <223> n = A,T,C or G

<400> 445						
ccattgagcc	aaagaaaggc	caccccccca	acagccccca	cacctggata	anagcgccct	60
gcaagaactt	cttntggaaa	accttctcct	ngtgcaagtn	acccancct	gggcatagca	120
ccctggccac	cctgngagat	gccaacggag	acctgaataa	agactgtcaa	tcagcaaaaa	180
aaaaa						185

<210> 446
 <211> 300
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(300)
 <223> n = A,T,C or G

<400> 446
 ctgaagagct accatttggg tgctgggatt tgagctcatg acctncnnaa gagnetgnnn 60
 cgngctntt accnctnaa nnatttcacc agaccnctg atcctccttn tgcgnatnct 120
 gctacctgct ganaggcccg ggagctcttn tggagactat gccctatcct acgtcatcac 180
 ctgcagctgg ttccaggctc caaggatgaa ttggcgggaa tggactttcc cccctttttt 240
 cccccctctt ttctaaagcg tgtctgccat taaaaatttg aaccttgagc aaaaaaaaaa 300

<210> 447
 <211> 152
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(152)
 <223> n = A,T,C or G

<400> 447
 ctggtgatgt ccctccctgg gacacatcca gaggggtgtg caggagtcca aagaaccang 60
 gactcaggac ctgcgggcag ctgacctctg ctgtgttcac tgcacagaaa tttttaaatg 120
 acttttatta aatccttaca aaacagaaaa aa 152

<210> 448
 <211> 247
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(247)
 <223> n = A,T,C or G

<400> 448
 acgactgggc ttccagtgtg ccgtggggga gtcagggtca ggcggaccgg aggtctacca 60
 tgacacacgt gtttccgncg ggcacgcata cacncacgtc cctgaccatc ctgttgccga 120
 gttggtgccc ccggnccctc agtgaccccc cccacacttn gttnngagcag nggcccctgcc 180
 tcanaatggg cagacctttt aggaaactng gatcanacgn gactcggctg gcacccccact 240
 ggtgccc 247

<210> 449
 <211> 228
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(228)
 <223> n = A,T,C or G

<400> 449
 tgaagagcag ttttgtccaa aaagaacatc atctccagcg gagaaagggc agctctgagc 60
 ctcgaggaga gactncattg tnancctctca gactacatac cttggncctna caatgaaaga 120
 atccaatatt gganganca ngaaaggaac tcagngcncc tngcnccagg tcaangngtg 180
 gacctcatag cctttttggt cagngtgtnc ctagggaac ataataac 228

<210> 450
 <211> 136
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(136)

<223> n = A,T,C or G

<400> 450

agtctacata	ccaagctcca	gnncagccaa	ggctacncag	anaaatcctg	tcttggaata	60
caaccggnncn	nacaancctc	caaactgagn	aatctgtatt	tagaacgatt	gctcatnttt	120
atgacaaata	aagtag					136

<210> 451

<211> 485

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(485)

<223> n = A,T,C or G

<400> 451

aactccctgt	ggttggaatg	gcttctctct	ttcattcaga	gggcttctct	ggatcaagcc	60
aggcgaanaa	gctgagactc	caggcataca	actggttatc	cagggagctg	gaccttcaact	120
ccgacttcca	gctctccacg	cgctgctcac	cgctccctgtc	ccagacagga	aacagtaact	180
gatgctggaa	cacaggctcg	tgggacccgc	ccactaagga	tctctcagcc	accggcagcc	240
acagccacgg	aggagctctt	tgtggtcttg	gcttttcaat	caaggtttgt	ggccaaggct	300
agagaggcag	ctctcacctt	caatgaaagc	atctgggtct	cagtcaagat	tgatctgcac	360
tcggatggat	tccctgtctg	ccagacaacc	ttggaatcca	ttagggccgg	gataagagcac	420
gatggaaggg	gaaggcgcta	aggcacgcaa	catgtcacgt	gacaccagca	gtttccgttc	480
cctct						485

<210> 452

<211> 558

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(558)

<223> n = A,T,C or G

<400> 452

ctgagagtac	cagtgatggg	gactccagcc	tctgtcgtga	gcgagccacc	cctgtggcag	60
gtttcaacac	ctcagacccg	gggccgcaag	caggcctctg	ccaacatctt	ccaggatgct	120
gagctgggtc	agatccaggg	cctgttccag	cgcagtgggg	accagctggc	tgaagagcgg	180
gcccagatca	tctggggagt	tgcaggggat	caccgtgtag	ctgagggcgt	gaggaggctg	240
cgcaggaaaa	ggccgcccac	acagaaccac	tgcagccggc	ttagagtggc	ggagcctggt	300
tctacagcgt	ctgaccccca	ggccagcacc	actgacacgg	cctccagcga	gcagtctggg	360
aactcccgga	gaacaagtgc	tagagcccc	cggaaactgga	ataagccagg	ccccacaggt	420
tacctccacc	agatcagaca	ctgactgggt	aaggggtggg	gaggtcctcc	ccaaacactt	480
gcagggactt	tggccaaaang	gcttatggag	ttgtaaaaaag	gacatntgag	cangcccttt	540
gtaggtgaaa	aaaaaaag					558

<210> 453

<211> 221

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(221)

<223> n = A,T,C or G

<400> 453

attgtgctca	gcacagaggt	gnttcgtgac	cnngactgta	cttctnaatg	cntgcatgga	60
tgccagacac	cncgancngn	aagcgtncnt	nagngctnca	gagcttatgn	agtgntaaan	120

gattctcaag	tggncatctg	acccaccatg	atacagntct	gactgttgct	accaccnta	180
ggaagaaaac	gctgagtcac	cngaaaccaa	agaaaaacaa	a		221

<210> 454
 <211> 181
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(181)
 <223> n = A,T,C or G

<400> 454						
gctgggaatt	aaccttngna	cctgatggaa	naagcggcga	gncaaccaca	acccatcgct	60
caagcccat	tgctgggcct	ggtgacaacg	catgtcagtc	ctgcctcagc	cccctgaatg	120
catgtttaca	gatgtgcacc	agagcacctg	actcaagttt	taaacgatca	ttttgagcac	180
t						181

<210> 455
 <211> 457
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(457)
 <223> n = A,T,C or G

<400> 455						
aacctcagaa	aaaagtcttc	aaggctcgga	aaacaatgag	agcngagcga	tcgccagcag	60
ctcgatgctg	tgcncagagt	caagggggag	ctgctgagag	ccgacgggaa	gctgctgaac	120
gggagccatg	agaatggaga	cttggatccc	acttnaccct	tggaaaacac	agattgtntt	180
caagatcgag	aagaagtgaa	tggtattgat	gggattttgn	tttcagtcag	aagaaagnnc	240
aaccgggaat	gggaaaagan	gaccccttg	tattgcccaa	tggtttgcct	gtnataaaac	300
aaaaccnnga	agattttgaa	atagtngaag	gctttttgtc	ccccccant	ttttctatan	360
ttnnatnncc	ntaacanaac	nggggggggg	nggggggggg	ttcnggggcc	ttntnaanng	420
gttngntgnt	cccccttttt	tttgtctagt	gggggggc			457

<210> 456
 <211> 237
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(237)
 <223> n = A,T,C or G

<400> 456						
gctggcacgg	agcatnctat	ggcatcgatga	gcctgcagct	gatctccggg	gtgngtgctg	60
agggnacat	cacatacngc	tggtccaccc	agagtgcana	ncnctcactc	tangactcag	120
gctagaactg	gactgcacag	angaccctcc	cncnangata	aatganactt	anancctn	180
tttaccantt	gcggatctat	aaaatngnac	ntaactatac	taccaataaa	caaataa	237

<210> 457
 <211> 348
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(348)

<223> n = A,T,C or G

<400> 457

tatggcatcc	aaactgngct	nntacaagtg	ccctgtctgc	ttncagnact	nncacngaaa	60
tgtcaaagtc	caccntgggt	aaacatttct	tgtantccct	agtccgctna	aacaacagta	120
aaacggttgg	nccntganca	nntgctaaat	aaagaaatat	ntgcgtgncn	nagccttaaa	180
tttgctatat	cctgtntcaa	tctactgcta	acatagcgtc	ntagagaatn	gnagctaact	240
ttcaaatatg	nntctaaaat	gaccagaatc	agccttccaa	atgaagaant	agcaacgnct	300
aatgctgcgn	tgattatctg	ggacagngca	tgacataagt	agggcata		348

<210> 458

<211> 101

<212> DNA

<213> Mus musculus

<400> 458

acgtcccact	gagtcttgcc	cacctctccc	ctgaaacttc	cgcgctcta	aaaaagta	60
gcgtcttggg	aacacccaag	gttggtcatg	tggcagcata	a		101

<210> 459

<211> 246

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(246)

<223> n = A,T,C or G

<400> 459

gctgtgaaca	gcttaccctt	gatcgatgat	ccgcagaaac	nncaagagag	accttgtctc	60
agtgacgtgg	aagangaatc	agtgccccc	nnaaagatc	ctgaccttct	tttgccatag	120
catgtgtgag	cctgnactca	ccccttccct	taataataat	aaaacaacaa	ctttgtgant	180
tgngacnnat	nnanncatag	catgngtgag	cctgtactca	ccccttccct	taataataat	240
aaaaca						246

<210> 460

<211> 294

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(294)

<223> n = A,T,C or G

<400> 460

gcccacctgc	atccgcttcg	gctttttaa	atgaaacac	gcaactcccg	ccgncggcac	60
cgaagngcag	aagatgcca	ggtttccgga	gcaacagctc	agngtcact	atctccgccc	120
cgcggcgcct	ttcccgccaa	aggccggtac	caccgcggag	catggtggga	cacagcttgc	180
aagataggtt	tcacccaatc	tttttanagc	gccnagctgc	tttcanagag	ggtctacccc	240
cgaggtggcc	gacgattctg	gactcagtg	ggattaataa	taaccgcttt	aacc	294

<210> 461

<211> 106

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(106)

<223> n = A,T,C or G

<400> 461
 gaaaagcgca gggcccatcg accactgaag acaacgggag ggagctggaa gacggngatg 60
 gncctgganat cantgctgca ctcttcctgn gagacgattg aagcct 106

<210> 462
 <211> 347
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(347)
 <223> n = A,T,C or G

<400> 462
 gagcctttga agaccagata nctaataaac tctagatnca tccatgggtg cntcngntnc 60
 cttcntannn atggttnncat attannnanc gttnggnccn tccngcctcc gagcccagga 120
 tgcaacctgga tgaaaacaaa atcccacgtg actggccctg agctcagatc atcatggcgt 180
 ctcccagtgga gaagggatct tggacgccc aggtccttg ttttgggccc cgggcgctag 240
 cacgggacct ggtggactcg gtggacgacg ccgagggcct ttacgtggct gttgagcggn 300
 gcctctgtgc aacaccactc gccggnggtg acttgcgcca agtgcgt 347

<210> 463
 <211> 472
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(472)
 <223> n = A,T,C or G

<400> 463
 agctttggag aagcctctga agggccagga acccgagggt gttctgctga gagtcgacat 60
 catggatggg gagagcagag gaggacacga agggcaaggg gagcagcagc agcaagaccc 120
 tcagtcgaca cattgcaggc gcccttctatc cnggttttagc ctactcaga tccagtacct 180
 tacctttgcc ttcatctctg ccttntgctg gacacccggn cacccggtc cggacaccgc 240
 cggatacggg cagttaatat ccagttctgg tctcgagcct gggcaaatta ctggagcggt 300
 cgttgggtgt cagggctccg ngagactggc cacgcnctaa ttgtctcacc acgccctnca 360
 cacacggtcg cctaggatcc tctactctcc accatcggtt ctctggcata tccacatctg 420
 tattgttgac tgaccacacc tcttaagcca tactcctcgt ggatggccac gt 472

<210> 464
 <211> 480
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(480)
 <223> n = A,T,C or G

<400> 464
 agcctcaaata gcagcctgct tgnccacctc cttctccact caggncacaca gctctgcata 60
 cctacacttc tctggntccg gntcactgaa aaaacccaan atccacatgc ccacggactc 120
 ntccccact gactnnatcc cacttcctgt agagttccta aacaatccca anaaagcacc 180
 tccagccaaa aanggacccc ttgatgactt gganaaagac cctccaggng ggnngnccan 240
 aangtgganc tngcctccct gnaagagctc ttctggaaca tggcaagtcc aagccaacag 300
 gctgggaccc canagatttc ctctgggagc tcacaatgct acatcaataa cttanattac 360
 ttactgcaan aaaagaggat gctggttga naatttctcc ntgtccctgc angtcatttc 420
 nccagtgcata ccgggtgaaa ctgtattctt ncctaagcnt caccctttgc cttgcttcct 480

<210> 465

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<211> 139
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(139)
<223> n = A,T,C or G

<400> 465
ctggaacaag aggggtctca nccctcctt tgtggactta gcattacagt cnctaaatgt      60
gtggacttgc aacggaaatc anattcaana atcatgttct tgttggacta ctgaaaagct      120
tgaaaagatt tcatatact                                     139

<210> 466
<211> 216
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(216)
<223> n = A,T,C or G

<400> 466
aggcctgcat gcttganceg ttgcntccgc cccgcggnag cacnatgtct gnatgccatc      60
nccccacagc tgganagggc agtgctgnag cagnncctta ttgcatgnag ccactcttan      120
aattctctca gntgaagtgg tgntttttat tatatataaan gtacactggt gngnncnna      180
aacactccag aatnaggng tcagatctca ttacag                                     216

<210> 467
<211> 277
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(277)
<223> n = A,T,C or G

<400> 467
tgtggggttg ctcactgttc ttcttgaagg aggagtgact ggccgccacc ggcacctgga      60
accagcacc caggaggtga acccgacgg acctgaggag gatcctgtgt cctgtgtcct      120
tgaggacta ctcactggg cgagatgacc acagccacca ctttngggga cgccgtcttc      180
tngctganca tgaccagggg agaggacgcc ctgtntaana gctctggagc catcgtggct      240
gccatcgtgg tnggtngtna tcatcattgt caccttg                                     277

<210> 468
<211> 363
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(363)
<223> n = A,T,C or G

<400> 468
tgtgcatgca gagaccacag atgtcatctg cagaaacaac ggtcaccttc nttganacag      60
agnctctnat tgnccctggag ctgccaatta gncncaactg cagccagcan gccccagagc      120
ttctcctgtt tctgcctccc tagcactggg gttaaaagtg cagaccacca ctctgcacct      180
ttatttacat gggtccttgg gatcaagttt aggtccttca ggctccagag gcaggtgcat      240
taccactgtg tgtgggtggg cctgatgcag ttcttgtgac ccatccccta atgaataaag      300

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gagccaatca ctgggcaagt aggagggact tccaggntgg actgaggaag agaggaagca 360
gga 363

<210> 469
<211> 291
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(291)
<223> n = A,T,C or G

<400> 469
cggggctgtc tgttgactct gccagaact ttttcacccc aggtatctaa atccttgctt 60
caaaggtcac cactctctaa gngagacctt ccctcattgc ctgcctgtaa gatggaatga 120
tcttccctgt gtcaagcttg cctcgtagcc ccttcttcat cctatctctg acttcttagc 180
cgaggaaaaa tacttaagaa aagaattctc attttgtttt ctgctgtttc cctgtaccta 240
gtacaatata ctacacatgg caggaatggt ttttttttaa taaaacattg a 291

<210> 470
<211> 199
<212> DNA
<213> Mus musculus

<400> 470
catacctaac ctatcgaggt tcaagtcccc gttccatagt ttgcaaggaa tgcagatttg 60
aaccaatgac tcaacgtctc cgtgctacag attttgttagc atcaaccag caccgacttc 120
acagagctgt acagagacta aggactgctc catattaaaa cactacatgt tcccgtgtgt 180
gttaaactat acaaaaaaa 199

<210> 471
<211> 164
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(164)
<223> n = A,T,C or G

<400> 471
acatgtgaca tccccaccaa cggtctgtggg tctgagcact gaaactcaga gctntctgga 60
ttgaacanat gtgtgttgtt actgttgac gtgtggcttg tgattttttg ggggcggggg 120
agttgttttg naaaactatc cccccccca tctctcaaaa aaaa 164

<210> 472
<211> 290
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(290)
<223> n = A,T,C or G

<400> 472
tgaggaaaat tcccaggtat tcatgtaaca gggaattgag gtaactaaga atgtctggca 60
ctgaagaaga cttatgtcac cgcatagaa tagttgtcog tgtacgtcct gagaacacaa 120
aagaaaaggc ggtgcagttc tgtaaaagtgg ttcattgtagt ggataaacat atactcagtt 180
ttgatccgaa acaagaagaa atcagttttt ttcacagaaa gaaaactacn aattttgata 240
ttactaaaag gcaaaaataaa gatctgaagt ttgtatttga aaaaaaaaaa 290

<210> 473
 <211> 252
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(252)
 <223> n = A,T,C or G

 <400> 473
 taaggctcaga ccctatgcat ggggcggtag tataagctgg gacggcntgc tgccaacact 60
 aaggattgga cctngccata tacacangag tncgagntcn aggaggcagt aaganagtac 120
 tgagccctga gatggngatg tnagagaatt gcttcctnna gcctctgagc tgttatattn 180
 ggcnaacaa gggatnactg atgttgnnnc acaatgagct tgntgcacc naagancctg 240
 gaaaaagaac ag 252

 <210> 474
 <211> 126
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(126)
 <223> n = A,T,C or G

 <400> 474
 accaaagtac atattnaagc cttctccagg gaanagccca ggcacacggg ctnaanatga 60
 ngcngcngn annccccctc agagggagaa tgtggtccag caagatcana ctttgcgctg 120
 tctgtg 126

 <210> 475
 <211> 121
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(121)
 <223> n = A,T,C or G

 <400> 475
 acatgtacca acaatttata tnaacaaaca aataataaca tnaatnacat aagtgactnn 60
 caagcnanga ctacatagag ataccctagc tcaaaaaaga ccaatagaat acaatggaaa 120
 a 121

 <210> 476
 <211> 322
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(322)
 <223> n = A,T,C or G

 <400> 476
 ttttaccatg acacanaact ggcctggagg agctggtggc acggttgagc ctggggccct 60
 gcccacatga tcacccctcg aggggtttgg gagacagagg tgacccgggc ttttggggct 120
 ctggtgtgga tccgttgtga caagtatgca ggagacttgc tgcagcttcc tccagcagtc 180
 caggagctgc ttctcagttt ggtccgagat gctgccggca aggaagacat cattgagtgg 240
 ctcggccatt ttggcatctn tggctacttgc cccaaccag agatcctgat ctgccttgcc 300

cggcagcaga aggaaagcgc cc

322

<210> 477
<211> 413
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(413)
<223> n = A,T,C or G

<400> 477
caggggtgtgg gtgacccatg tctanacgcg ggattcggng agtactnaca gnccttnatcc 60
ttacanangt gggcacatac tatttcttca ggatncatag gaanttnccc ngtcctttatc 120
tcaanccttn cctcaattct tttccntaca atacaatgat ttcactataa anantaataa 180
ctnaaaaagc cgtngggngt ncngccccng ggagccggcc aacctggaga gcagaaatgg 240
cagactcaaa tagatcccca agatccaggc ccaagcctcg gggacccagg agaagcaagt 300
cggacagtga cacccttttt gaaacttcac ctagtncctg ggctacnagg agaaccacca 360
ggcagaccac catcacggct gantncacga agggcnccac taatcggaac ccc 413

<210> 478
<211> 462
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(462)
<223> n = A,T,C or G

<400> 478
gctccactgt tgggtgtgagg ggctctccag aaaccaattg cctgatccga ttcattgccc 60
agcagcgaaa cctaaagaag gctgtgctct ctccgttggc acgagagccc cacttcgagg 120
gtagcccaag actgtatcga aatgccagt ttttaagaga gcagaatgtc tgcttttcgg 180
tcagcttttc actccataca ggaaactaag atggccagca gtccctcagc agcagaggca 240
gacggagagt ctaggatata agatttgacc agaaaagaag atcttcttga atatcagcag 300
tctgggttcc ctgtaaactc ctcttcaaag cggaggagaa tatcctccca ggacagccct 360
gacaattatc tnagtggcnc caaagccctt gctgacgaag cgtgtgctgg ggggtgcctnc 420
acagatcttg ctgagaagtc acctgacatc ggttccgccc ag 462

<210> 479
<211> 112
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(112)
<223> n = A,T,C or G

<400> 479
ctctgacctg ctggcatgag tggnettcgt ggccaacacc ttactctcag ggcatgtcac 60
tctgtgcctt aactcccgtg cagtgggttg cccgagaggg ttccgccttc at 112

<210> 480
<211> 129
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(129)

<223> n = A,T,C or G

<400> 480

agccgggtttg	gactgactgg	ctgcctncct	cctcctgccc	ctcctcccgc	ttctgcttca	60
gatttantta	ttatatgtan	gtacnctgnn	ncagtctgga	ggacnacta	nacgagggca	120
ccacgatct						129

<210> 481

<211> 162

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(162)

<223> n = A,T,C or G

<400> 481

ggaccctctc	catggcaacg	ggnanctcac	tgagangnga	gtgtancnca	acagcangnt	60
gcnnatatgn	agncatagct	gatgctccca	ttatattata	tagtgaccga	gaaggcgtgg	120
aattattacc	catacacnat	nacagaatac	actgggtgct	ta		162

<210> 482

<211> 339

<212> DNA

<213> Mus musculus

<400> 482

cttactgtcc	ctctgatgcg	gcctaggatg	acctgggagt	gggcttctgc	cctggctggt	60
ggagaattat	cttgactaag	tgaggggcag	cccggaatgg	agctgaccag	cacagcagaa	120
gccaggaagc	gacttccccct	ccttgcccgc	attcttcgct	tcctttcgct	ggaacccttcg	180
caccaggcct	ggccagagat	ctccgtggaa	aacctctggt	acccaggccc	agagacagtg	240
aacaactgct	tagatctctg	cattctttcac	ttcccaccat	gagctgtacc	cctgcagtgt	300
gagccagaat	aaaccttttt	ttcccttcaa	aaaaaaaa			339

<210> 483

<211> 107

<212> DNA

<213> Mus musculus

<400> 483

caggatgctc	tggtctcatc	cttagcccag	ctttgaacac	actgcttgga	caggcttctc	60
ctgcctaaga	tttgacaact	gttcagttgc	tgtgattaaa	aaaaaaa		107

<210> 484

<211> 107

<212> DNA

<213> Mus musculus

<400> 484

caggatgctc	tggtctcatc	cttagcccag	ctttgaacac	actgcttgga	caggcttctc	60
ctgcctaaga	tttgacaact	gttcagttgc	tgtgattaaa	aaaaaaa		107

<210> 485

<211> 107

<212> DNA

<213> Mus musculus

<400> 485

caggatgctc	tggtctcatc	cttagcccag	ctttgaacac	actgcttgga	caggcttctc	60
ctgcctaaga	tttgacaact	gttcagttgc	tgtgattaaa	aaaaaaa		107

<210> 486

<211> 235
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(235)
 <223> n = A,T,C or G

<400> 486
 atcacccctca actatcaggn tcgggggtgct aggtttcctg ancactgnag atnangctgn 60
 caaggggcaac tatgggctcc ttgatcaaat ccaggccctt cgctgggtga gtgagaatat 120
 tgctttcttt ggaggagatc cccgtagaat tactgtcttt ggctctggca tcggtgcata 180
 ctgtgtcagt ctctttacac tgtctcatca ttctgagggg actcatggag cctgg 235

<210> 487
 <211> 101
 <212> DNA
 <213> Mus musculus

<400> 487
 ccacccaact tggaaatatg agtcgtctac agcctctgct ctagtggcat aaatgctgtt 60
 gtgtgcacaa gcaataaaat cacctttgag taaaaaaaaa a 101

<210> 488
 <211> 145
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(145)
 <223> n = A,T,C or G

<400> 488
 cccgtcacac accccgattt cgaaccaagc actgaagtga gaaacatttg tttttaaaca 60
 acntgtctta atagtcttac atttaaaaaa taagacgatg cttcctatta aacttgctat 120
 tataatatag ataattaaaa aaaaa 145

<210> 489
 <211> 175
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(175)
 <223> n = A,T,C or G

<400> 489
 ggttatctcc ctttccacat ggggagcagg tcagacttga gacttcatct ctttggtttt 60
 gcacgatata ccngtgatga acctcaacat aaaatactgg gtttggttaa tccccaggac 120
 acanananaa gagggggggg gtttacnttn agggaatccc cgggggggcc atctg 175

<210> 490
 <211> 401
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(401)
 <223> n = A,T,C or G

<400> 490
gagccctgaa gttgggattg ggncctgcang tcaatcagac gctgcggn tn ntnattgata 60
tccaagnaag cagagaatgt gaggnccctcg ntagctccat gagtgaaant cttccaggac 120
tctgtataaa gcgtagtac ttctanaaga aaagactggc cacaagcctc tacaccatcc 180
cagccagcat ctgcaccaag tgactctggt ctctaatatg ctactttaac attcacagtg 240
ctggccattt aatacacaaac atgtgtatct tcngaacaaa aanactatac accgtgncca 300
gccagcntct gcaccaagtg actctggtct ctaatatgct actttaacat tcacagtgtc 360
ggccatttaa tacacaacat gtgtatcttc aaaaaaaaaa a 401

<210> 491
<211> 120
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(120)
<223> n = A,T,C or G

<400> 491
ggagagctac cctctnanng gccgganccc tactcaganc gttangacta tcctnanang 60
tgcgatctca cctgattaat gagcccnaca ccttttgtcc ancgcaatga ggatgcttca 120

<210> 492
<211> 194
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(194)
<223> n = A,T,C or G

<400> 492
gaaataacac tcaggagcga ccagggactg agcgagtgga gttgaccgga gcaagangag 60
gnccataaaaa ttcaatnncc ancaaccaca tgaaggctca caancatctg tacagntaca 120
agtgtactca catncataaa ataatgaata aataaatatt tagaatgata tcgngaaata 180
aaggtcattt aatt 194

<210> 493
<211> 118
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(118)
<223> n = A,T,C or G

<400> 493
catcggtgac ctgccaaagga gtgaccataa aggaannacg aacttgnent gtttgggcat 60
taaagaaaac gtggttttaa naatganact nttacctggc ctcttccaaa acgacata 118

<210> 494
<211> 255
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(255)
<223> n = A,T,C or G

<400> 494
gattccaatg gagggagatg cccacntgag agatgggagc ngatcaaaaag ccccatctct 60
ctggattttc tacacaacca gtatgaagac aaaaaggaag atctgaggct ctcgaggctg 120
ggtgtggtgt tgcacaccag tacttgggat gcagaggcag gtgaatctct gtgagttcaa 180
ggtcagcctg gttacatagg gagtttcagg acaatcagga ctccatagag agactcgggt 240
tcaaaaacaa aacaa 255

<210> 495
<211> 267
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(267)
<223> n = A,T,C or G

<400> 495
taacgttagc cttacggctn gaaattnacc ggcanctgct gtgcatctgg gccttgcttt 60
gctccagctn gtcaganccg aagnocgaga aagtgnntca nancggncng atgggcagcc 120
angcncgtgn catcacaan actcacacac ngacttcaag anagcctttg ggtcatcgct 180
cccttttctg tcctttttgt gcatttttagg acaccgctgt ggtctgtcca agctgttctc 240
aaaacctgtg aggtaacaga aaaaaaa 267

<210> 496
<211> 373
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(373)
<223> n = A,T,C or G

<400> 496
aacacaggct ttgcttcaac atgagcaaag tctctgcgca ttcaacccca aaggtctgac 60
ctaccttgcc cagccgacag ccgctgaggg agtagctgga ctcagagagt gctgctccag 120
tgcttttgac atcttgtcta acaaggcacc caggcttccc cgtgggcggg ggcggggcgg 180
ngggcagtga actttgatga ggggctgtgg aacacagact tctgaactag actgcttggn 240
cttcaactgct anctctaaca tngngctgctg catanagaga gttanacccc tgcctctnna 300
tcatactgaa natgactgnt gaaagagana atgaaaaant acctggttaa aaagagaata 360
aacactaaaa acc 373

<210> 497
<211> 145
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(145)
<223> n = A,T,C or G

<400> 497
gcctggagga ggtgcagcgc actgcctaca cctntgagag ngggntgggg cctgcaaccc 60
aggccctttc caaganatct ggcntggcct gcaaggcatc tgcccacccc ttaacagcat 120
cctgcccngt tttctttgccc tgttg 145

<210> 498
<211> 205
<212> DNA
<213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(205)
 <223> n = A,T,C or G

<400> 498
 tcaacggcca tgtccgattt gacctgcccc cgcanggctc tgtcctggcc cggaatgttt 60
 ncacccgggtc ctgtccctcc cngcactagc cctgctcgcn ganctgngag gaagaanagg 120
 acagggtgt accgaccgga aaaggggggac ctggaagagc cgcccgcccc taaaaatctn 180
 ctaagaagaa aagcaggggg gagac 205

<210> 499
 <211> 379
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(379)
 <223> n = A,T,C or G

<400> 499
 ccctcctgga gacagatgga agctccttgg gtcgacagat tacagcttct ggaacccccct 60
 actcccttca actccgagat ggacacccac tgtccaggga gaggatgcct ggaaataaca 120
 gctgggatct acagtggcca aagagttgtc tccgtcttgc tacatcgaca aactggngct 180
 cctgagttag gattgngccc tgggatggng gattcagttc nttcatttat agttggaaga 240
 agantnaaga ggatgtagng tgtccntntt tntattccat gcncagtgcn aagagngact 300
 gnaccctcca aanggangtn ccgtgatggn ncttcnaatg cntgcccga ngccgatgat 360
 caaccctgca ctccaaaag 379

<210> 500
 <211> 113
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(113)
 <223> n = A,T,C or G

<400> 500
 atctcacgta ccagatgcta acanaggang ggncctgangc agcctggctg ccacaggctg 60
 canaaaggct cccgatggnc atnagaccat atngaccgac ccagaggcca ccg 113

<210> 501
 <211> 147
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(147)
 <223> n = A,T,C or G

<400> 501
 catccaacgt gtgatnagcc catntctgtc canctggggg aggcactttg tgctgnncac 60
 canntcaacc tgcttaangn tgatgacatc actgaaactn tagngnatgg gccngcctct 120
 gtaaaatcga tcgagagggc aaaccac 147

<210> 502
 <211> 169
 <212> DNA
 <213> Mus musculus

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<220>
<221> misc_feature
<222> (1)...(169)
<223> n = A,T,C or G

<400> 502
aataattgtc tccccgcctg gccaatcagc cctcttttcg gcaatactnc angctacctc      60
agagcatcga actccaagca cttnacanta ctggtttgng gantcncana acnaccctaaa      120
gancagcccc natnantncc tttgnctgan ggggggatccc gcatacatc      169

<210> 503
<211> 213
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(213)
<223> n = A,T,C or G

<400> 503
cttttttaaac agactganca ccgngtgctt ctcgctcaag atgatctgat gtctgaagtg      60
gactctcact aaccatgatg gcgacacaga cgctaagtat agacagctat caagatggac      120
agcaaagcat ctgagttcag ttcccagaat ccctggcagc ttacaactgc ccgtaactcc      180
agctcatata tatgtaaatc aaaataaaaat aaa      213

<210> 504
<211> 176
<212> DNA
<213> Mus musculus

<400> 504
ccctgacgat ttacaggaga tacaggaact tattaatgta atgagacaaa ctggtttcat      60
tttctacaaa aggaagaaaag gattgtagct aactgtgat cttaagtagg aaatgtcctt      120
gtgccagagg ttcaaaggaa gcaccagcca tcgtttaatg agctccgctc gagcca      176

<210> 505
<211> 103
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(103)
<223> n = A,T,C or G

<400> 505
aagcttcacg ggtaatgacc caccttggag aatgggaaaag ctttatnaag ngggtagang      60
agaattttcc tgacactaaa gaataccttg atgacattaa aaa      103

<210> 506
<211> 380
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(380)
<223> n = A,T,C or G

<400> 506
tcctcatgcg ggtgaagtat cttttctttt cctggctggg ggtttttgtc ggaagctgga      60
tcatntatgt gcagtattca acctatacag agctatgcag agggaaggac tgtaagaaaa      120

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tcatatgtga	caaataacaag	accggagtta	ttgaccggac	ctgcatgcaa	cagcctctgt	180
gtcacagaaa	cactgtactt	tggaaaatgt	ctgtccaaca	ngcccagcaa	ccagangtgt	240
ttagnagttn	ttgatnntct	accannngat	gctnanngtn	nnntgggnaca	agctnttcat	300
nttgncntnn	tanntgnnn	ggatncnnta	nctgnagtat	cagctatatg	atanaccgac	360
caggggaact	actgctctta					380

<210> 507
 <211> 186
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(186)
 <223> n = A,T,C or G

<400> 507						
aatttgagca	ctctgtggct	ggctgactta	taaattgacc	tgatangtag	gtccttggac	60
tgngatgaaa	gaggcgcact	gagacactaa	nnctnnatgg	ncttgggctc	cccgtccggn	120
cggnnttttc	tcngnagcag	tagtgaanat	tggggtgctt	ttacaaagct	ctatagccac	180
catctg						186

<210> 508
 <211> 438
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(438)
 <223> n = A,T,C or G

<400> 508						
gactgagatt	tgcactgggt	agagtctact	gtctgggtctc	cttgggtttct	ctagtccaga	60
ggatggggca	cccacacgga	gatacaagac	catttgaaag	atgcctgatt	gaaagattgg	120
attgagctgc	cgattcctgt	gagctgtact	gctgatgtcc	tgacaatgca	gattggattt	180
gtcccaaaga	actatcttct	aacagggttct	tctttgccct	attaatcttt	ccttcccact	240
acctctgggtg	tggnggggcta	gaaggggacat	taaaacattt	aagaacaaca	accctcgaac	300
tgtgaggctg	tcagcttcag	acaagagaga	ctatttactt	aaatggccaa	tttttgttta	360
aaatggccac	tcaaattaaa	aggaaaagtg	aggatctgga	gagaggctca	ncanttaana	420
acactgactg	atcttcca					438

<210> 509
 <211> 239
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(239)
 <223> n = A,T,C or G

<400> 509						
gactgagggg	cccctctgct	cactgaganc	ctggactttg	aagagncaag	nncnacttng	60
ttgccaggct	cctctaactg	cccnaaggat	gaccttatcc	atctggccag	tncttcaatg	120
ancacttnca	ccnaatanat	ggaattcnca	nccaacagat	ntttcccca	tgatccctca	180
cctggcggat	tgtctcatat	agnaagacat	cgtcaattca	cctcactgga	gacacagtc	239

<210> 510
 <211> 170
 <212> DNA
 <213> Mus musculus


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<220>
<221> misc_feature
<222> (1)...(170)
<223> n = A,T,C or G

<400> 510
ctcaggcctg ctgtcaaaac acaccaatgt ctttgtcagc attcaggagg cagaggcagg      60
cagatcagct gtgagtttgt ggncagcctg gtatctacct caagttccag gtcattcaaa      120
gctacataat gagaccctga tcaaacgaaa tgaaaggaaa caaaaaacaa      170

<210> 511
<211> 305
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(305)
<223> n = A,T,C or G

<400> 511
atccccatct tgaatcagag cagctgttga ccaaccacag agcctctgga agtcaggcct      60
atcagcattc ctgcatggaa gantgaggaa ggctcctncc agaagctgta tcaccagtga      120
atgatgactg ggaanaanat tggttgganc aaaagggtgc ntttgatccn ccaaggccct      180
taaaattcca caaaaagggtg gaatttnntt ttgcttaaaa aaaanggggn gggaaatttt      240
ttnaaaaaag ggtttcccc cccntgggga aaggttcccg gaaaaaaaaac cccttttttc      300
cccgg      305

<210> 512
<211> 297
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(297)
<223> n = A,T,C or G

<400> 512
tggcacagcc tgatanaccg nnaganttca nactgttgn atgacaatat cacacancaa      60
agtggatgatn ggctcagccc tcagagacct ggcancatnn aacactattn gtggtnngaa      120
ncccacacnc tcccaacacn catttttgtg cacagaacca gacgtntgac tctnacctt      180
gggctngetg gaccgccttt agaanaagtgg tagcctagtg tgnnggtccg atcagaccca      240
tgctgatttn tgcgctttng gatgnctgtc cattttacct gacatttaaa aggcaca      297

<210> 513
<211> 414
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(414)
<223> n = A,T,C or G

<400> 513
gcaggcatat tgtgtaacag tntgtanaact gaaaggcctg ggggctatgg agagagacnc      60
cggaaggctc gccagctcc ggtcagcaga cangctcttg tgcgtncccc ttggaagaga      120
nggaggagcg aattgacaca ggatctcatg tgcaacantc tancttcaaa cttgctatgt      180
ancccaagat ggcgacctcc tgatactcct tccagttccc aaatgtnggg gtttcacgca      240
agcaccgtgc aggcacagac atcatacatc tgctacccag gagactgacc tcanaacagg      300
acggagacaa aaggttctcc aaggaaagtt ccagcagagg gaggaggcca catcatctca      360
gaatcatcct aggagaacan caacgcattn catgtcctgc ttcagaatgc taac      414

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<210> 514
 <211> 172
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(172)
 <223> n = A,T,C or G

<400> 514
 ttttattccc ccatgctggg catggaggaa aggccttgct atgccacang gnggngngga 60
 gncgncctca cattgggcat tntaagatgg nactgacngc tgggttctaa ggggtaaaca 120
 tagtctgcnc acatgcaggg gcagggtntcc caccatgtgt tctgcctttc cc 172

<210> 515
 <211> 279
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(279)
 <223> n = A,T,C or G

<400> 515
 gcgcgcacaac ttccacaactt ccctntcccg tcacaggggn tctatntncc ccgcengttt 60
 ggcggaagga tncgcgcgcgc ggnggcggan ncgngctnan ccgtctncgc ccgggctncg 120
 ncccaccccc accccacagg nccagagggt nacaagnnnn taagctttng ataatgngaa 180
 gctccaggta nagaggatgc ctgccgggtga gcacattaca gctnttgctg tttctggtgt 240
 atgtaatat taagggttgaa aaaataaatc tcaaaagca 279

<210> 516
 <211> 363
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(363)
 <223> n = A,T,C or G

<400> 516
 gactgagatg gataacgacc agccgcctgt ggtgactgcc accctgctgg tgcccccttca 60
 gaacgggagc tgcncngaag cagntgaggc cctgctgccc catggcctga tgggattgca 120
 tgaggagcac agntggatga gcaacaggac agagcttcat nacgagctga ncncctggaga 180
 ggtgtncacc gacagcatct tctttgncgc tttgnggtng ntntccatct ttggcaantn 240
 cntngtatgt ctggncatnc accgcatccg gaggactcag nccaccacca nctacttca 300
 ggngagcatg gcgngtgntg accttctcat cagctgtagn cagnacnccg attgtcgtgc 360
 tgc 363

<210> 517
 <211> 152
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(152)
 <223> n = A,T,C or G

<400> 517
 acatcctatg tggatggggg ccanccttaga acaccttagn atgttnagga tatngctttt 60

tagaagcaca	gttntatata	aagggtccta	taagnggcc	anatagnana	tattantact	120
gnctttggtt	gtgcaactat	gttgcttttg	gg			152

<210> 518
 <211> 351
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(351)
 <223> n = A,T,C or G

<400> 518						
actgtatgat	tactccgtgn	nnnngtcaga	ggatnggctg	aacaggttga	ataaggaggt	60
aacaacaaca	gaagcggtag	agactacagc	ctcttcatac	agtcttcata	caagaactta	120
tggaccctgn	gaatcctgta	accacgaaac	cagtgaccac	agaaccagtg	accacagaac	180
cagtgaccac	agaaccacag	agtccaaatc	agaatgatgc	catgtccacg	ctgcagagtc	240
ctgtgtcctg	ctttctgtta	tnnaccctcc	ttcaaggagg	ggtacatttt	atgtagaagg	300
aagagggcan	cccctggcct	tggtggggng	ctataaagta	attcttacca	g	351

<210> 519
 <211> 358
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(358)
 <223> n = A,T,C or G

<400> 519						
gtgattcctg	gagatatctg	cgtggaaaag	cctgaccac	agtcctgtgt	ctctagccac	60
tggcacctga	aggattccct	ggaacttttg	ccaaggggtg	gctgaggggtg	tgactogtac	120
tgggcttcca	agagccacca	anctggaggg	gccagggaca	acataaggaa	gcagtaacat	180
cgttntgnga	tgtcacctac	aaaaaaaaatgn	cacaanccac	annanctgct	gttntggaga	240
tctgngcaac	atctgnctgg	nggaagctnc	gtnaccnct	tgtgcatctt	ggctgctntg	300
ttaccannct	gncctggctc	ttgccaggac	tgtacanctg	naggggtggga	ccgagggc	358

<210> 520
 <211> 448
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(448)
 <223> n = A,T,C or G

<400> 520						
gagttgctga	actccaanta	ctgttgaggc	taccntggn	annaacatnc	acggncgcgg	60
ggggnngnc	ttcttacaan	aagccctgcn	ttctgntaaa	ggctgggctag	tagtcctgct	120
gtacaaatag	aaaattaaag	anctcttaca	gggagggcgg	tccctcagaa	aataataana	180
catacaagaa	atatatatcc	ccanctgaca	ttcaagtcct	atggngggng	ggctntntct	240
gcatgcacca	ttccacaggc	tcacttntga	tggggcacc	tgcattcatc	nccactact	300
ccctgttnt	nttctggnac	cccaancatg	aactgganct	cccacatctc	acagtganng	360
ctggaccag	tccaccggg	acataaagct	gcaaanagct	accattctat	gnaccngtn	420
gatgaactga	tcaagcccac	cggctctag				448

<210> 521
 <211> 183
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(183)
 <223> n = A,T,C or G

<400> 521
 actgaggtat gaactgctag agaaataaaag ttctgccaaa atattgcata tactagtatc 60
 ttgtaacatg ctttcttgaa agattttggg gctttanagg gtncacacct gtgctacagg 120
 ggactgggaa aaagtggaaa taaagtgatt gtatttttta atcatcaccg tataaaaaaa 180
 aaa 183

<210> 522
 <211> 110
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(110)
 <223> n = A,T,C or G

<400> 522
 catgttttat ttgacaattc ctgcggcgtn taaagtgaan gtncatannc ccctgngccc 60
 gcgctcggtc actcagactc acatagnntt ggctgctggc tgcgttccca 110

<210> 523
 <211> 201
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(201)
 <223> n = A,T,C or G

<400> 523
 atgcatgact acagcnagcg cannnccnag gnnaggang ccgaggnta cgcagttcct 60
 tcacangtnt gnatnnattg cctactgtgt gccannctgt acaagtcttt gtccttgggc 120
 tcctgctaac agatttttaa atgtaaatcg acaactgatg ggtgaatgtg aatttgctac 180
 tgtgaataaa tatagccagt a 201

<210> 524
 <211> 128
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(128)
 <223> n = A,T,C or G

<400> 524
 cagctggctc caaaggtttg nggntcatt catnnctctg acctcactgn ctgaataaat 60
 gaataaaatt ccaaataagc atncttgctc tgaccccggg cctaaaancg gngatcctgg 120
 tggggctg 128

<210> 525
 <211> 377
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature

<222> (1)...(377)
 <223> n = A,T,C or G

<400> 525
 aggggtctgct catccctgag tcagcagaag cgaccggcat cagccagaat accaggagaa 60
 gttctttgat gcgtttctct ctatgaagtg aagaccagcg aagcattgta cagtgtatca 120
 atgcaagagc tgtctcccca cagttngtgg gggtccatth atattctttc taaacatcac 180
 aagccctctc aagtgtctgc agcaaaacat cacacagccc tctcagaaga cagcgtccag 240
 gaaaacatca cagatataaa gggagttnge taaaganacc agaattttcc cacttccatc 300
 cagaggcagg tggatcttct gtgagttcaa gaccagnctg ttctacatag canggtttca 360
 agctaggtag ggttaca 377

<210> 526
 <211> 140
 <212> DNA
 <213> Mus musculus

<400> 526
 actcgggcac cgttctgaca tttaatgtgg aattttacatg atccctcaca tcccatccca 60
 cggttcattc acatgaagat tcatccaagg ggaaaaccag agttcttga agcccgagtc 120
 caaaacccaa agaaaaaaaaa 140

<210> 527
 <211> 248
 <212> DNA
 <213> Mus musculus

<400> 527
 agaactgagg tctgcctggg cttatgaaga caaagccccc caagaccaat gagcagatgc 60
 ccacagcagtt ggccaggatc atctgttgaa caccctctca ggtactccac ccaccagtgg 120
 ccacagttaa gctctggaat gtgctcagga tgatggacaa caaggactta gaagccgaaa 180
 tacacccctt gaagaatgag gacaagaaat cacaggaaaa cccaggaaaag ccccgtaaa 240
 aaaaaaaa 248

<210> 528
 <211> 121
 <212> DNA
 <213> Mus musculus

<400> 528
 ggtgcatggg cgtgactggg ccaaaatttt cgaaacagga agagtaccct cagcaaatct 60
 gagcacattg ggttgacaat cttctcgcag aggcagggtg atcaacctgt ccttcatgcc 120
 a 121

<210> 529
 <211> 281
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(281)
 <223> n = A,T,C or G

<400> 529
 tgaacttgaa gcttgagtta ttganatcag gggcnaacat gctgnaccca acgagtgaag 60
 gggacctttt tgaccaagaa aacatggagg agatctccca actcgttcc ctggagatgt 120
 ctgggggatg tagtcgcaa tacaaactca accagtcgtc ctagaaaaac ccagctaccc 180
 agactccggg tacgttacgg nagcgaacat tnttcagggt attcggatcc aaaggnccgc 240
 agacaaagtc ataataaatt acggaagtga acccctgcaa c 281

<210> 530
 <211> 101

<212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(101)
 <223> n = A,T,C or G

 <400> 530
 caggttctga acagganctt tgacgagcgg cantcaaaga gttaatgctt ctggcctagg 60
 agatggcgctc nncagatntt nagancagca gctcttcaca t 101

 <210> 531
 <211> 177
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(177)
 <223> n = A,T,C or G

 <400> 531
 tcctgcgctt tgacgacgga gggctactac aggcagnttc tcttgagtca tatgacnatt 60
 cttctttcct gccntggaaa ccagtgaact gntnttcctg nnctatgnan tatgaacngt 120
 atnacngtcn gtgnagttat ctgcatgaac ctntactag aattaccttt ttagagt 177

 <210> 532
 <211> 367
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(367)
 <223> n = A,T,C or G

 <400> 532
 agtgggggtct ttcatactga gccctggaan aggacaaaat cgctcaggag agactataag 60
 gtacaatgtg gacattctca gccttaagat gtggaaatth agccagagct cacagcatgc 120
 cgtggagggt gccgacagga caccaactct gcagactgtg tcttctcaga aagccgcgac 180
 cagctctgaa aatcaaacc tcttcagctt gtgtcaccta cggaacggac agccagtcag 240
 ataaagaaaa caagagaacg gtggaaaagc tcagtgcatt ttcagttgac attagaaaaa 300
 tccgcaggct gaaaggatgg ggtgcttcta gaggaagaaa cctacgttga agagattgca 360
 aatattt 367

 <210> 533
 <211> 102
 <212> DNA
 <213> Mus musculus

 <220>
 <221> misc_feature
 <222> (1)...(102)
 <223> n = A,T,C or G

 <400> 533
 ctctgttttc cagtgtgatc aatcaccaat acaaaggagt tcatgtgaca nctncgccac 60
 ttttaatatg aagcacttat tgaattataa aaaaagaagc tc 102

 <210> 534
 <211> 212
 <212> DNA

tccggggatg ccacnctnac natatttccc caaagatgga ggcctt

286

<210> 538

<211> 266

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(266)

<223> n = A,T,C or G

<400> 538

gactgagatg	ctaagccgat	ggttattcca	tcancacctg	cccaccagta	atggaactca	60
ccgaagcata	cagccgtcct	ctnttgntca	tggccagggn	ncangacgca	gggacaacgc	120
ctgntgncag	atgccgnntt	nnggaaaccn	agcncctgccn	agaggantgg	actccgtgca	180
tcaggatgag	ancaaagaga	acngactggg	actggccatg	caccnngng	tcntcaaaac	240
antaggagag	ggcagataaa	tccttg				266

<210> 539

<211> 498

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(498)

<223> n = A,T,C or G

<400> 539

gacgtctggg	gagctcctgc	attaagtcag	actgaggngg	gnncttncat	ganncggtnc	60
tgaacnnnnn	ggngacgcc	ntnccatggc	ctgagctgna	ntnantacct	gncagatacc	120
tatnaattca	tttattncac	cganaanata	tctacctaga	ggatctagat	ntcgtaccat	180
ggcataangc	ggnctgcact	tgttattagg	aagaataaan	agctctgcct	tancaggtgt	240
tcaacattaa	tantacanan	aangcttagg	cnncaagacc	ngttacctct	cccaggaagc	300
atgcatgcag	cactgctctg	gtaagcagat	gcctcctttc	ctgaccccg	gcctaaaagc	360
ggatgatcctg	gtggggctgt	tcctcatggt	tctgatcctc	ctcctgggaa	cctctatggt	420
ctgcctcatc	cgtgtggttc	gcanaaagca	ggagcgtgcy	ctgcgcactg	tttgagcac	480
tgcgatgac	aaggagca					498

<210> 540

<211> 270

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(270)

<223> n = A,T,C or G

<400> 540

gactgagtcg	ttctgccant	ctttaantgt	ctganttacc	ttgaaagang	tgtggagaag	60
tgcacagtag	tcgccagagc	ggntaaatgc	ngagtcntcn	ttcagttcct	cggnaaagcat	120
gggtnttaaa	aagacctcac	attgtgtntt	tccaagacag	cccagccctt	tgaaaatttn	180
tctttcaaaa	aagaggctgg	ggngcgaaat	atccctggat	ggtttaaacc	caagncttgg	240
ctggactgaa	ggccattgg	ggggtttttg				270

<210> 541

<211> 361

<212> DNA

<213> Mus musculus

<220>


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<221> misc_feature
<222> (1)...(361)
<223> n = A,T,C or G

<400> 541
gtgctgtcac cctactgngg ncatcctgtt tgaacacacg actacctatc cctcaaccag      60
atcgtngcgc atantaatga agaaacacac aggaacaagt gctgaaaacc anattatnaa      120
gaacagcttg agcangggcc cgtgatagaa tgactcagcn aggtgttntt cactataaag      180
cntgaccggt acccacatgg ccagtaccac caacatccta ngaacctgaa tcctcccaaa      240
gacaggtgag cgctcgtgat tctctgagca gnaagggaat tttgttttgg gtcttatttg      300
ccagctgaga aaatgcaaat ggnatattca ttaagatgtn atgcggggag aaaaataaaa      360
a                                                                                   361

<210> 542
<211> 217
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(217)
<223> n = A,T,C or G

<400> 542
gcatactgga gtgatctggc atagactcat actgtgttag aaaagggagc ctggntcagn      60
cctctctggc aggctngcac ctntatnctt ccttcttgga atcaagacat gggattatcc      120
ttcctcctcc cccagggtct cacagcacag gccctgctct gtgtgagnga cctccttcag      180
agacacttgc cccatgcagc tcgatgggtt ctgggttt                                217

<210> 543
<211> 427
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(427)
<223> n = A,T,C or G

<400> 543
gactgagatg ttaaagtgac accaagggnag tagtgatgnn ggtggntgga ggctgggtcat      60
ctaccttaac agcaaagaca ctaannagat gtntcaagat gctgcgccct ttaccgatgt      120
ctgagttgtc cacacttcca tcctgatgtc cttatgtggg tgaagatgat cccaacctgn      180
agccaacaca gaaaagccca taacctgtgg ncctcaccac ctctacagca ntgaaggtct      240
ccagngtcac cctgtggacc caccacaccc agctgaagaa ggctccagga gataacagag      300
atgggtggtc atcaggtcct ncaacttcct aaagatagga ctaacggggg gcctattatt      360
atcgggtgnc ctttctttgn tctttccatt attctgatca ttccaaatat taacccttta      420
aatactg                                                                                   427

<210> 544
<211> 362
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(362)
<223> n = A,T,C or G

<400> 544
ctggggcacag gccatagata cttcttgn gn aactctcaaa ngttggattg gatatcangg      60
ccgngntcat ancaaaagtc ngngcagnan gcctnctngn acgntcnang ncagggcngg      120
agacactgan cagccnatct ggcctcagca acnagcacct gacagtnngg acngtanaga      180

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aggctctcac	ggctgcnatc	ggaggctgca	aacgccgagn	ttnnccggccc	agcaggtnaa	240
catatgggca	gcaatgctgn	ngctgtcacc	accaccacca	ccatagccac	tgtcaccacc	300
gaggatagga	agaaggactt	taaganaaac	cgatgnctgg	ctattgggat	acagggggac	360
ga						362

<210> 545
 <211> 235
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(235)
 <223> n = A,T,C or G

<400> 545						
gggcacccag	acattctacc	tccaagaaac	cacgctacag	tcaccagata	aaagtggctg	60
ccacaggtca	cctggctgag	caacactgct	ggccagtcgg	aggttgcttg	ccagacagga	120
gctganccca	cctgcagcca	agccttccag	cactaagggtc	cccagcagtg	ggaagtactc	180
aaacnggntg	aanagccatc	aagggcnaaa	cttgagggggg	gggggggggcc	caaat	235

<210> 546
 <211> 117
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(117)
 <223> n = A,T,C or G

<400> 546						
cgttaggggc	aaaaacccag	ggcaaggatg	ggaaaagcaa	gtactcgact	ctcagcctgt	60
ttgacaagta	taaaggagg	tcagcaggcg	cntgtcagga	aataaataag	agaata	117

<210> 547
 <211> 206
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(206)
 <223> n = A,T,C or G

<400> 547						
gactgaggac	ggtacaccca	gcaagaagtc	tangcaggga	aataggcaan	actncanttc	60
ngtgaatatt	tcagnggtnc	tatgtgnagg	agccctgggn	tgtnctgaaa	cttgctctgt	120
ggaccaggct	gacctatgcc	tactgaatgc	tgggatgaaa	ggcagtgcac	caccactatg	180
cagcattttt	ttttttaaaa	gggcc				206

<210> 548
 <211> 239
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(239)
 <223> n = A,T,C or G

<400> 548						
gttaagaact	gttcagatac	cacgaagtca	tcatgtgacg	tgacagataa	gtgggttgga	60

gggcatggag	agctacgtcg	tcgccatcgt	catagtgcac	agaggggact	tgaccgtgtg	120
ccgctgctca	gactacatcg	tgccctgcaaa	cgctcctctt	gagccgccag	aatttgagat	180
cgggtggcttt	acagaccaca	taaancgtga	cgatgggaat	ttccaccttg	gacccaag	239

<210> 549
 <211> 111
 <212> DNA
 <213> Mus musculus

<400> 549						
gactgagagc	tcagagacaa	ggaagcagca	gtcacactgg	gggccacaga	agggccctca	60
gtggcgtcca	tggctggcct	ggacccccaca	ctgagcacaa	gtcacccatt	g	111

<210> 550
 <211> 120
 <212> DNA
 <213> Mus musculus

<400> 550						
agcgtgaggg	ttcaaaaaagg	attcttctgct	ccaatgagat	catccttcca	gccagtggcc	60
tggtggagac	agagctccag	ttaaccaa	taagtttctc	aacatataaa	aattaaaaaa	120

<210> 551
 <211> 287
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(287)
 <223> n = A,T,C or G

<400> 551						
caaccctgaa	cccacnacaa	tgacattatg	atggngcatn	tgaaaattca	ntcaaattct	60
ctaaaagatc	cagcctctgc	cttgaagatg	acctgctctg	aggagaatcc	aactgcnaat	120
tctgggctgg	gnaagangga	aatgggggct	tccagnncca	ttannngct	gttnccatnt	180
tgngcccn	agcagngtga	gcgnnctncc	ctgnaagata	acccaaanna	tggggggcgc	240
angcgantga	aaaaaggaac	caattcctnt	caggggggatt	ttggagg		287

<210> 552
 <211> 397
 <212> DNA
 <213> Mus musculus

<400> 552						
atactccttg	cttagtttta	ggccattgac	tatgcagcct	agtgactgga	atgatgtgaa	60
aaaacctaag	tatggtcact	tgtcagagtc	tgcatctcaa	tatcaagaat	ctgttgacat	120
cctggagcta	ggtcatttta	cctgggacaa	atacctaata	gaaacatggt	cagtcccagc	180
gcctgtccat	tgttcaagc	agtcctacac	acctccaagt	aatgagttca	agatcagcat	240
gaaattggaa	gcacaggatc	ccaggaacac	cacatccacc	tgtattgcca	cggtcgttgg	300
attgacaggt	gcccgaacttc	gtctgcgcct	tgatggcagt	gacaacaaga	atgacttctg	360
gagactgggt	gactcctctg	aaatccagcc	accgact			397

<210> 553
 <211> 277
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(277)
 <223> n = A,T,C or G

<400> 553
actgaggaaa gaagangatg gagnagncgc cgaatctgag gccttggtc cegtgtttgg 60
gaccaggagg gaaggagaga agatagattt cgctgagaca cttgcccggg tccctttgtg 120
ggtcagaatg ggtcccgatg agaacctgag tgtgagagtg aaactacgga gtatcatttg 180
tagctttgtt cctcaagact tgccatgaga tttaagtaga gcgcctgtgt ggaaattgtt 240
aattgtagct agtcagatcg aagactattg acagcat 277

<210> 554
<211> 109
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(109)
<223> n = A,T,C or G

<400> 554
tttgacctgc tcctgggaan ttgctgnntc gttaaaggcac tncnntatgg aactgcagca 60
gccnncaagg acagcatctg ctataacctc cagaccgtgg gggagggtct 109

<210> 555
<211> 215
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(215)
<223> n = A,T,C or G

<400> 555
ttcctacagt tccacctacc tcgtgtgtac aaagctgcc ccttncagnc ctcnnggctg 60
gnctcctgta ggacctgnga tcccacctcc ngactccagn tacnccanc ttccacctga 120
anggggnctc tgctngccaa natatcanc ctgaattctc ctaacaaagg tgtactgtct 180
gactttatga ctgacntccc tgtaaccca ctttt 215

<210> 556
<211> 358
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(358)
<223> n = A,T,C or G

<400> 556
actgactgcg agtccccag ttcccctgga gatctagctg ggagcccagg ctgtgacaag 60
acacgcggct gtgcaaaggc ggtagacat tatggaggag acggtggaga agacagtgga 120
gcacctggag gcggaagtga cagggtctgct gggcctgctg gaggaactgg cttcaaacct 180
tcccacaggg cccttcagcc ccaaacctga cttgcttgga gatgatggtt tctgacttcc 240
agggatggtg gagcctgcca gctgaagtca tccctcanag aaccaagcca ggtcttcctg 300
ccttcctgcc ccacctttgt gtgaaataaa agctccgatt tggaccctaaa aaaaaaaa 358

<210> 557
<211> 471
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(471)

<223> n = A,T,C or G

<400> 557

cacttttcac	gcaatgtccg	atcgtttggg	gcaaataacc	cagggcaagg	atgggaaaag	60
caagtactcg	actctcagcc	tgtttgacaa	gtataaagg	aggtcagtag	gcagctgtca	120
ggtcctcagt	tattcctaga	catggcttac	agagtctcgg	gaaagttgcc	acantccggc	180
ggnngccacc	cgccctgcaaa	cctgccaagc	ctgaagtctg	aaaacaaagg	aaacgacccc	240
aacatcgtga	tagttcccaa	ggacgggaca	ggatggggcca	acaagcagga	ccagcaagac	300
ccaaagagtt	ccagtgtgac	ggcctctcag	ccgccggagt	cgcagncgca	gccggggttg	360
cagaaatctg	tctccaattt	gcagaaaccg	acacagtnta	tcagtcanga	gaacacaaat	420
ncagtgnacg	gtggaccaac	antcatgggc	nnaacagagt	acaagtagtc	g	471

<210> 558

<211> 362

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(362)

<223> n = A,T,C or G

<400> 558

gactgagatg	ggaacagcac	atcgctgctt	tgggggaagt	ctacaactac	tcctgtgaac	60
cagattcaag	aaacaatttc	tancanttgt	gtgggtgatct	tctcaaaaac	atcctgctct	120
tactgttcca	tggccaagaa	gattttccat	gacatgaatg	tcaactacaa	ggctgtggag	180
ttggatatgc	tggaatatgg	caaccagttt	caagatgcgc	ttcacaagat	gactggggaa	240
agaaccgttc	ccaggatatt	tgtcaatgga	cgattttattg	gagggcgagc	ggacactcac	300
aggcttcaca	aagaagggaa	attgctgcct	ctggttcac	agtgttattt	aaaaaaaaa	360
ca						362

<210> 559

<211> 135

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(135)

<223> n = A,T,C or G

<400> 559

ggatgccctt	gggggggttcg	tgtatcgngg	ggatcaatgct	ctacaggcca	nantcaccct	60
tattgaaagg	gangtncctc	cacctttngt	tcatggcana	agantataag	ntganagctg	120
tctgcggttc	ccttt					135

<210> 560

<211> 174

<212> DNA

<213> Mus musculus

<400> 560

gaactgaggt	attctcatgg	gagcagtaat	aaaagttata	gagtttataa	agctggcaaa	60
ttggaaggag	gaagaaatgt	ttcgccccaa	catgtttttc	cttctcttgc	tcccacctat	120
tatctttgag	tcaggatact	cactgcacaa	ggggaacttc	tttcagaaca	tcgg	174

<210> 561

<211> 300

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

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<222> (1)...(300)
<223> n = A,T,C or G

<400> 561
atctctactg cctccaacac gccgaatcct ggctganctt ttacagcaaa cagccaactg      60
gaacaagatg aatgtggaac agtaccctgc ccctctggag tgttataatg agttgggaca      120
tgtctctgta gaaagatttg cccaactttg tcaggaactc atggatacac taagggaat      180
aaggcagccc aagagcctct cttttgctac acgtatatgc cacaaatgtg gcgagccctg      240
tgtctatggt caggggggta gactttgttt ttgctggcgg ngaacatgga ttcagaactt      300

<210> 562
<211> 192
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(192)
<223> n = A,T,C or G

<400> 562
atttcgcaac tgaaacttgc aatcatttca gggccatacc cattaaacaa gcacagtgcc      60
aggtaaaaatg acaggcgaaa ctgcatccat gaatttacgg agggactatt tggttttcat      120
ttantacttt taccacctca ttttatgtct ccggcaaagc caaaggaacc aaacttactt      180
taaaaaaaaa aa                                192

<210> 563
<211> 359
<212> DNA
<213> Mus musculus

<400> 563
ctccaacctg tcaagttggt ggagatcctg caatcgccgc cgccgctgca gcagtcctga      60
aagcggcaga gccatgcagt gagcacatcc agcgaccgcc ggccccacag aggaaggctc      120
cagcctggaa aggaaatgct atgagatggc aagataggga caagagagac agtcctgagg      180
tttctcagtg tgacagcgcc caaaccagag ttcagggtccc aactcacagc caggttcctt      240
cgtacgcccc agcgcttcct ctctaagcct tagaagtgaa agtatctggg ggttgggaca      300
atcaccaagt atgtctacaa acggctttcc ttaaaccatc atcaataaag cgagcaaga      359

<210> 564
<211> 327
<212> DNA
<213> Mus musculus

<400> 564
ggcaggcaca gctcctctgg cagaogtagg tcctgggtgga aacgggggttc aggggactcc      60
gcagccttca ccagcatgag ccatccagag gagtcaacag aggtgacact gaagactgac      120
gtggagtcag gagccagtgg ctacagtgtc acagggtggag gggatcaggg gatcctttgtc      180
aagcaagtac tgaaggactc gtcggctgca aagctgttca acctgagaga aggagatcaa      240
ctgcttagtg cgaccatatt ctttgaccat atgaaatatg aagatgctct taaaatcctt      300
cagtactcag aaccatacaa agttcag                                327

<210> 565
<211> 119
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(119)
<223> n = A,T,C or G

<400> 565

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tgtaatggaa	tccgatgtcc	tcttctgggc	tgtctaagag	atctacagta	aataagtaag	60
taaaaaagaa	ggaaagaaa	acaagaaaag	ganagtgaat	gaaagatttt	ttaaaaaaa	119

<210> 566
 <211> 125
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(125)
 <223> n = A,T,C or G

<400> 566						
agatccccaa	ctcccaccaa	nagccagctt	tangtgtntt	aangacagta	cnaccatcga	60
gcatggtngc	tcctctgnat	gnngggagat	gatgactgtc	ncattgctgt	gtgatggcct	120
ggaat						125

<210> 567
 <211> 362
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(362)
 <223> n = A,T,C or G

<400> 567						
gggatcgttt	gcctaagatg	cgaccatgcc	atccaggctt	ctccacaccc	tggaagttt	60
acacagcata	tcaagcaaag	gctcatcagt	gccagagact	tacttggtt	acattaagac	120
cacttaggaa	atcctngaaa	gtacattttt	gccacagggg	gcctgacaat	acangctaca	180
ttgacnctnn	ttatttgcac	cntatgncng	ntgancagtt	cgganncggn	ncanganata	240
cctggaaang	anncgataa	catcangaca	caagccagac	tctttgtcgn	taaangctag	300
nccatnnggt	tggaacngcna	aaaacaccng	ncaagnonnt	gcnccccctt	ttgggaatca	360
ca						362

<210> 568
 <211> 186
 <212> DNA
 <213> Mus musculus

<400> 568						
gaccggagct	ggctgaggat	ccaggcagga	gctgtgcagc	atctgagtca	ggctcgctct	60
ctcccacacc	ccagagccga	cctgcctgaa	cattcgaggt	tattcttagt	aactctcagg	120
tttcaactcta	gcacactgag	catgctcaag	tgggtaaata	cagaaatctg	tttttaaaaa	180
aaaaaa						186

<210> 569
 <211> 101
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature
 <222> (1)...(101)
 <223> n = A,T,C or G

<400> 569						
acctgactga	gacatgcagc	ttccctgtgc	ntcactaggc	caccaggata	tccacctgtg	60
acctcncntg	gataaatgtt	tctgttttgg	aaaaaaaaa	a		101

<210> 570

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<211> 137
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(137)
<223> n = A,T,C or G

<400> 570
tattctcaga ggaatagggg agaattnagg aaaatctggn atttcctacc nngaccangc      60
nncagaagct tcccacannc ntgtaggcat tgccgctcat caggaagtcc cgtcttacgg      120
aagccagtta tcactta                                     137

<210> 571
<211> 412
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(412)
<223> n = A,T,C or G

<400> 571
tgagcctgat gatagcagat cttaatgatg gaaggtacac gcccatgcan ccttgtgaan      60
caactggggac cacanggnca nagagtcccn tgatacccan gtntcatttn ctcaaggacc      120
cagcagactg aggacatctg caaaattcct aaggctagag ngaaagacta cagngaactc      180
taacacccca gcaaggtccc accttctcct atcagagcta cgggacaccc aacctgggcc      240
gcacgcagtc ttctctgcag ttggggacagg nnnntnntct gnccttgntt tcccacagcc      300
ngtttttcan nncnanaatt nccatgctng tggggccctg nattttagna natnntggan      360
cannctgtnc ctggggcggn cccagcgctc acctggaaca gaggggagcc ca              412

<210> 572
<211> 426
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(426)
<223> n = A,T,C or G

<400> 572
ggagctgggg agaaggtgaa ggcttgccat gntcannctg gcccaagcca ttccagggac      60
tatctttngt tactattgct gtgataaaac acctgacca aaggcaaggt ggagaangan      120
gggttnatth caacttacaa ctcttggttg actccatcac tganaggatt tgaggcataa      180
actcaaggaa caaacctang aggtaggaaac tggangacat gggctnggag aagactgctc      240
ttactggttt ggtncnnaat gtttgcccag ggtgctttct catacaactn aggaccacc      300
ncgnagnngg gccagaggtg caccaccogt ctgtaactcc agnttcaggg gataatctga      360
tacctctttt tggctccaag aacangcagg catatacaca taaatgcagg gcaaaacatt      420
catacg                                             426

<210> 573
<211> 767
<212> DNA
<213> Mus musculus

<220>
<221> misc_feature
<222> (1)...(767)
<223> n = A,T,C or G

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<400> 573
gtactgctca aacggacctt cgaggacaga ttgCGGagcg tctactcgag acagcagggt      60
gacaagtctg cctccagttc tctcactggt ggatcttgag acaacaggaa aatgacttcc      120
catgacccaa aggcCGtcaC tcgcagaacc aaggTggctc ccaccaagag gatgagcagg      180
ttcttgaaac actttacggt ggttggggac gactaccaca cgtggaatgt caactacaag      240
aagtgggaga atgaggagga ggaggaggag ccagcGccca catcagcaga ggtgagggc      300
aatgctgcgg gccagatgc cgaggctggc tctgcctcca cgcccaggca gtccctggac      360
ttcaggagcc gactgaggaa actcttcagt tcccacaggt ttcaggatcat catcatctgc      420
ctggtggtcc tggacgccct cctcgtgctt gctgaactcc tcctggattt gaagatcatc      480
gagccggacg agcaagacta tgccggtcac ggcgttccac tacatgagct ttgccatcct      540
ggncttcttc atgttgggag anttttttta agatcttcgg cttncgctta gagttctttc      600
accacaaagt ttgagaaacc tggatgcctt tgtggtggng gggcttttnc gtccttgacc      660
tttggtnttt gttaaaagcc cccctctcna aactcttngg gttgctnanc tgctttctnc      720
tttnaggggg gccccctta ccaccgggnt ctccatctcc gggaaaa      767

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<210> 574

<211> 456

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(456)

<223> n = A,T,C or G

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<400> 574
ccttgtaaat gcaatggctg gaagacccta acccctctcc tactccacca agaggagacc      60
tgcagcagat aattgtcagt ttgacagaat cctgtogaag ctgtagccat gcccttgctg      120
ctcacgtttc tcaactggag aatgtgtcag aggaagagat ggacagactc ctgggaattg      180
ngttggatgt ggagtacctc ttcacctgcg tccacaaaga agaagatgca gataccaaac      240
aagtgtactt ctacctattc aagctcttga gaaagtcaat tttannaaga ggaaaacctg      300
tggttgaaag ctccttgagg aagaagccgc catttgagaa gcccagtatt gaacagggtg      360
tgaacaactt cgtgcagtac aagtttagtc acttgccatc gaaagaagag gcaggacanc      420
gatccgagct ggcccaagat gtttctgaac cgcatt      456

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